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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. GEORGE'S HOSPITAL.

I. SPONTANEOUS CURE OF EMPYEMA.

Under the care of H. C. JOHNSON, Esq.

A BOY in the above Hospital presents a very interesting example of the changes which follow after empyema in early life, and while the bones are still capable of yielding to the atmospheric pressure, and of assuming thereby a new direction as the matter gradually diminishes in quantity. The boy in question, Alfred Cambridge, aged 10, gave the following history of himself. He was quite well two years and three-quarters ago, at which time he caught cold, and was treated for inflammation of the lungs. He had then great difficulty in breathing, and complained of pain in the region of the left lung. Soon afterwards, a swelling formed between the seventh and eighth ribs, which broke, and other abscesses formed above the first, and continued to discharge large quantities of matter for many months.

There is at the present time a considerable depression over the whole of the left side of the chest, so that the natural convexity of the ribs is replaced by a deep concavity, in which the opening of the old sinuses may be traced. The bones of the spine also have been pushed over a little by the displacement of the ribs, forming a lateral curvature in this region. A little breathing can be heard in the remains of the left lung behind, close to the spine. The heart is pushed over to the right side, and its apex can be seen pulsating in the fifth intercostal space. The boy's health is quite re-established, and he is very lively and active.

II. CYSTIC TUMOUR OF THE NECK.

Under the care of PRESCOTT G. HEWETT, Esq.

ADA B., aged 6 weeks, was admitted under the care of Mr. Prescott Hewett, on May 28th, 1858, on account of a congenital cyst in the neck. At birth, it was of about the same size as on admission. It remained nearly stationary, but rather increased. On admission, there was a very large fluctuating swelling, which appeared quite superficial, in the posterior triangle of the neck, its anterior edge touching the sterno-mastoid muscle. The fluid was thin, the tumour semi-transparent. A band crossed the tumour transversely, dividing it into two unequal parts. This band appeared to consist of thickened fascia.

On June 5th, the cyst was tapped, and a considerable quantity of sero-sanguineous fluid drawn off. It was then left to fill again.

June 12th. The swelling having refilled, though not to such a degree of tension as before, it was again tapped, and three drachms of a mixture of equal parts of tincture of iodine and water injected. Some of this fluid was left in the sac. No unpleasant symptoms followed, and the child did not appear to suffer any pain.

June 14th. The tumour is about one third of its former size, quite hard and moveable. There are no signs of inflammation.

June 21st. The lump has gradually diminished, and is now hardly larger than a nut. The skin is quite loose and shrivelled.

June 28th. The hardness is now scarcely perceptible. The child is quite well.

The case was kept under observation for some weeks longer, and progressed without a bad symptom. The mother attended as an out-patient, on account of lupus of the nose; and used to bring the child with her. When it was last seen (about the end of August), the skin was gradually contracting, but still formed a loose shrivelled bag at the seat of the obliterated cyst, the remains of which could be felt below, in the form of a small hard kernel. The child was in perfect health.

HOSPITAL FOR SICK CHILDREN.

CYSTIC TUMOUR OF THE NECK.

Under the care of ATHOL A. JOHNSON, Esq.

JAMES C., aged 2, was admitted May 26th. This patient was in the Hospital in January last, with the same complaint. There was then a large prominent tumour on the left side of the neck behind the sterno-mastoid, extending from the clavicle as high as the mastoid process, and backwards to the trapezius, being bounded in front by the sterno-mastoid, which it partially overlapped; whilst, on pressure, a small portion made its appearance in front, a constricted line corresponding to the muscle separating the two portions. The tumour was very soft and fluctuating; the skin over it was not discoloured, but thinner and more prominent in one point a little below the middle of the neck. The neck on the right side, from the middle line in front to the spine behind, measured four inches and four-fifths. The left side, over the tumour in a corresponding position, was seven inches and one-tenth. There was no tenderness. The tumour had existed since birth. It was then of about the size of a pea, and occupied, as far as the mother recollects, the centre of the present swelling. For about six months it remained stationary, but since then it had been growing steadily.

Soon after admission (in January), the tumour was punctured; and several ounces of perfectly clear fluid were evacuated, presenting, under the microscope, only some cholesterine. About a drachm of simple tincture of iodine, diluted with an equal amount of water, was injected, and left in the cyst. No pain followed this; and the cyst remained contracted for about a week, when it suddenly filled again (in the course of a night) to about its original size. At this time, the mother, having to proceed to Newcastle, was obliged to remove the child, but again brought it to the Hospital on the above date.

May 26th. The tumour is now rather larger than before, but the child has grown as well, so that the sound side measures five inches, the left side, over the tumour, measuring seven inches and nine-tenths. The other characters are much the same (except that there is no protrusion in front of the sterno-mastoid), but a little solid swelling can be felt, deep seated near the middle of the tumour. The child is pale and weak, and there is a large belly, with fulness and enlargement in the situation of the spleen. He was treated with bark and acids; and, his health having improved somewhat, the tumour was punctured (June 9th) with a fine trocar, and four ounces of fluid were evacuated. When the cyst was emptied, a hard firm swelling, resembling a gland, about the size of a large hazel-nut, became prominent about the middle of the neck, its long axis lying horizontally, or in a position directed across the sterno-mastoid. The fluid was now quite changed in its character; it was perfectly fluid, flowing easily through a very fine cannula, but dark, and of the colour of coffee, having a balsamic smell, and, on rest, precipitating a copious coffee-coloured sediment. The clearer part solidified on being boiled, or on the addition of nitric acid, like serum. Under the microscope, it presented disintegrated blood-corpuscles, with a copious deposit of cholesterine.

The tumour partially filled again (to about half its previous size) by the next day, but did not continue to increase perceptibly after that time. The puncture healed at once, and there appeared to be nothing going wrong with the tumour;

but on June 12th, having been attacked with measles, he was removed upstairs to the fever ward.

June 29th. He was readmitted. The swelling was now of about the same size as at the last report (June 12th).

July 1st. The tumour was again punctured; but, owing to the toughness of the cyst and the bluntness of the trocar, little more than the end of the cannula was introduced into the interior of the tumour, and very little iodine could be injected. The fluid which came away was slightly tinged with blood, but much thinner than last time it was tapped.

July 2nd. There was no bleeding. The cyst was collapsed, and contained more solid matter.

July 17th. There was no further increase in size. The child was ordered to go home, and to be brought back again if the cyst enlarged.

August (latter end). He was seen as an out-patient. No increase in size had occurred. The tumour was quite solid, consisting only of an enlarged gland, of about the size of a walnut.

REMARKS. The above are instances of a disease which frequently proves very intractable, especially in adults, and which, from the situation, size, and connexions of the tumour, may in such cases become one of the most formidable ailments which a surgeon can be called upon to treat. A very good illustration of this fact was furnished by the case of a young woman who was a patient at St. George's Hospital several years ago, with a large serous cyst (hydrocele) of the neck, and in whom the tumour resisted for more than a year all the attempts made to produce its obliteration. Thus it was originally tapped and injected, as in the two cases here reported; then, as, after repeated injections, it continued to fill again, a seton was introduced; and, on this measure failing, it was laid open from top to bottom, and the lining membrane destroyed, as far as possible, with nitric acid. The cyst was still, however, undestroyed, and was apparently reproduced by growth from below. Accordingly, it was again cut down upon, and an attempt was made to dissect it out entire. This, however, was found to be impossible, from the membrane dipping below the sheath of the carotid vessels. Accordingly, the wound was kept permanently open, and the cyst gradually contracted, and at length, it is believed, became perfectly obliterated. In such a case as this, it is evident that the cyst must have had some origin more deeply seated than the common areolar tissue, but whether it was connected with the thyroid body, or not, seemed uncertain. The origins which are generally ascribed to such tumours, when they are not merely subcutaneous, are, that they are formed by dilatation of the cavities of the thyroid gland, or from cysts in connexion with the blood-vessels, either in vascular tumours or otherwise. (See Paget, *Lectures on Surgical Pathology*, vol. ii, p. 38.) In the two cases before us, it seemed most likely that the cysts had no such origin, and that the admixture of blood which the fluid contained was produced merely by exudation from the lining membrane of an otherwise simple serous cyst. It will be noticed, however, that in Mr. Johnson's case, after an apparent obliteration of the cyst, it rapidly filled again during one night, probably from the effusion of blood into its cavity, so that here some communication with the cavity of a blood vessel is certainly possible. In Mr. Prescott Hewett's case, the rapid and entire obliteration of the cyst by one injection argues against any deeper origin for the tumour, although here also the serum was mixed with blood in considerable quantities. The presence of cholesterine crystals in Mr. Johnson's case will be noticed. "Such contents", Mr. Paget says, "may occur, perhaps, in any cyst in the neck or elsewhere; but they appear to be comparatively frequent at or near the front of the larynx." An interesting circumstance in both cases is the absence of all symptoms of pain or inflammation after the injection of iodine into tumours which, considering the patient's age, were very large ones. The fluid did not seem even to produce pain, and the resulting consolidation was free from any indication of threatening suppuration.

ASSOCIATION OF THE FELLOWS AND LICENTIATES OF THE KING AND QUEEN'S COLLEGE OF PHYSICIANS, IRELAND. The following officers have been elected for the Session 1858 and 1859:—*President:* Sir Henry Marsh, Bart., M.D., M.R.I.A. *Vice-Presidents:* Charles P. Croker, M.D., M.R.I.A. and Robert Law, M.D., M.R.I.A. *Council:* Drs. Henry Kennedy, John Hughes, Atthill, McClintock, and Churchill. *Treasurer:* Dr. George A. Kennedy. *Secretary:* Dr. William Moore. Meetings of the Association are held in the College Hall, on the first Wednesday of every month, from October to June inclusive, at 8 o'clock P.M.

Original Communications.

ON SUPPURATION WITHIN THE CRANIUM AFTER INJURIES.

By T. HOLMES, M.A., Curator of the Museum of St. George's Hospital.

AT page 742 of the JOURNAL there is to be found a most interesting case reported by Mr. Dumville of Manchester, in which he trephined the skull on account of suppuration beneath the dura mater, with success, the patient having recovered rapidly. I was much impressed with the account of this case, having watched many such, and having observed that the uniform result, whether the operation was performed or not, was fatal; and that the *post mortem* appearances were in all these cases such as to show that no treatment could have been of any avail. Indeed, so constant is this, that I doubt whether Mr. Dumville's case is not the only successful one which has been published of late years, perhaps since Dupuytren's. (Chelius's *Surgery*, by South, vol. i, p. 399.) I was therefore surprised to see that Mr. Dumville has been led by his experience to the opinion that limited suppuration beneath the cranium "may not be so rare as some surgeons imagine"; and, as my own opinion is the direct reverse of this, believing as I do that an abscess properly so called (*i. e.*, a limited and encysted collection of matter) below the skullcap is hardly ever met with, I thought it might not be uninteresting if I endeavoured to bring together the facts on which this opinion is founded. If this paper has the effect of fixing attention on Mr. Dumville's case, I shall think my time worthily expended; since it is one in which (to judge from the description) accuracy in diagnosis and a judicious boldness in treatment were combined in a degree which is rarely met with, and by which the patient was rescued from a disease otherwise inevitably fatal.

The question then being, What is the relative frequency of limited and diffused suppuration beneath the skullcap after injuries of the head?—I shall endeavour to answer it by a reference to the *post mortem* records of St. George's Hospital for the last seventeen years, viz, from 1841 to 1857 inclusive. A detailed account of the dissection of every case which was examined after death (and these form, at our Hospital, a very great majority, and more especially of head-cases) has been preserved, and to this is appended, during the last fourteen years, a report of the case from notes taken during life. I propose to divide these cases into four classes, viz.:—

I. Those which were trephined during life for intracranial suppuration.
II. Those in which matter was found after death between the skull and dura mater.
III. Those in which matter was found among the membranes of the brain, but below the dura mater.
IV. Those in which the cerebral substance alone contained matter.

I. Of the first class, eight cases only occurred during the whole of the above mentioned period, and of these one was not examined. I append a succinct report of the seven in which a *post mortem* examination was made; in the other, the symptoms were similar, but, as it was not examined after death, I will not burden space with it.

CASE I (vol. v, p. 128). A man, aged 45, who had received a scalp wound three weeks before death, of large extent, and exposing a great amount of the bone (right parietal). He had no symptoms till thirteen days after the accident; then appeared dull and heavy; the discharge from the wound diminished, and the granulations did not look so healthy. Next day, pain and shooting across the forehead occurred. He was put on a course of calomel. On the eighteenth day after the injury, he had a fit accompanied by rigor, and the *right* side of the body and face was paralysed. Two crowns of trephine were applied on the exposed bone, and yellow lymph was found between the bone and dura mater. This seems to have produced no relief (the notes are wanting from this time), and he died on the twenty-first day.

On *post mortem* examination, the bone was found of a dead yellow colour. Thick concrete lymph was found above the dura mater; the membrane itself was thickened by an effusion of lymph. The clots in the sinuses were mixed with pus. Large quantities of lymph and pus were found both in the arachnoid

and subarachnoid cavities. There were secondary deposits in the lungs.

Case II (vol. v, p. 231). A man, aged 26, had received a blow from a falling body, inflicting a large scalp-wound over the biparietal suture, connected with a linear fracture on the left side, discovered after death. Seventeen days after the accident, he was attacked with rigors, which recurred frequently, and gave place on the twenty-first day to paralysis of the right arm, with occasional twitchings of the left side of the body. Next day, the paralysis of the right side was complete. On this day, he was trephined at the seat of injury; some pus was evacuated, probably from the diploe. He died next day, the symptoms persisting.

On *post mortem* examination, pus was found in the diploe, and in the longitudinal sinus, as well as in the arachnoid and subarachnoid cavities. The convolutions of the brain also appeared at one part of a darker colour than at others. Lymph was also found external to the dura mater. Secondary deposits existed in the liver.

Case III (vol. vii, p. 244). A man, aged 25, who had had a scalp wound on the left side, near the vertex, three weeks before admission. On admission, the wound was healed, except a small sinus which led down to dead bone. He had had rigor the day before, followed by sweating. The right facial nerve was partly paralysed; the tongue somewhat drawn to the left side; the right arm numb and almost powerless. He could not walk without assistance. He had slight headache. The pulse was 84, quiet and regular; the tongue moist; the skin cool. He was purged vigorously, and on the fifth day the symptoms had all disappeared, except slight numbness of the arm. He then insisted on getting up, and next day all the symptoms recurred, with slight numbness of the right lower extremity, and pain in the left side of the head. The pulse, however, was still quiet, and the skin cool. On the eighth day, there was almost total paralysis of the right side, and this became complete on the ninth day; the headache also was more severe; the countenance more dull and heavy; and the articulation thick and imperfect. He was then trephined over the exposed bone. The bone having been removed, some very fœtid pus, mixed with brain-like matter, exuded. The dura mater was found separated for some distance, but healthy in all parts except one, where a sloughy opening, the size of the tip of the thumb, existed. Pus escaped here from beneath the membrane; about three ounces altogether were evacuated. He survived the operation five days. Pus escaped freely during this time, but the principal symptoms were not relieved. The opening in the dura mater became larger, and the brain began to protrude on the day before his death. Just previous to his death, a discharge of matter occurred from the mouth and nostrils in large quantity, and appeared to produce suffocation.

On *post mortem* examination, no matter was found between the bone and dura mater. The brain fitted into the sloughy opening in the latter membrane, and the surface of the convolutions here was sloughy, and pierced by a hole leading into a large abscess in the brain, which had almost penetrated into the lateral ventricle.

Case IV (vol. ix, p. 245). George D., aged 25, was admitted with a scalp wound a little to the right side of the forehead, and another on the vertex, the latter exposing the bone. There were no special symptoms (except a slight attack of erysipelas) for the first ten days; then he had a severe rigor, followed by slight incoherence of manner and much prostration, with a little pain in the head. Next day there was also partial palsy of the left arm and leg. The scalp around the wound was puffy, but the pericranium was not separated. On the following day, he was much the same. An incision let out some matter from beneath the occipito-frontalis tendon. Next day (thirteenth after the wound) he was noticed to have some cough; his evacuations were passed involuntarily. The palsy was complete on the left side. The muscles of the right side of the neck were rigid, the features drawn to the right. In the posterior wound, the pericranium seemed a little more detached than it had been two days previously. His manner was oppressed, but he was not unconscious. The trephine was applied here, and a small quantity of pus found beneath the bone, with lymph and pus extending further than the piece removed. Accordingly, a second crown was taken away. The operation did not in any way relieve the palsy. The delirium increased. He sank rapidly, and died next day.

The pericranium was easily separable around the trephine holes, and the bone there was vascular. Pus was found in the diploe of the bone, in the superior longitudinal sinus, above the dura mater, in the arachnoid and subarachnoidean spaces over the right hemisphere, and around the medulla oblongata; and an abscess in the right hemisphere of the cerebrum. There was also secondary deposit in the lungs.

Case V (vol. xi, p. 199a). A man, aged 37, who had had, four days before admission, a scalp wound, not exposing the bone, over the left side of the frontal bone. The parts sloughed from tight pressure. Except symptoms of threatening delirium tremens (which subsided), he went on well for nineteen days; then pain in the head came on, with restlessness, hot skin, sharp pulse, foul tongue. No more distinct symptoms showed themselves till the twenty-third day, when symptoms of limited pressure came on; viz., partial unconsciousness (he would mimic gestures to which his attention was called), deviation of the tongue to the right side, and ptosis of the left eyelid. Next day he passed urine unconsciously, and on the following (twenty-fifth) day became quite unconscious. No general paralysis is mentioned. He was trephined on this day at the seat of injury. Much pus was found in the diploe, and a considerable quantity let out from under the bone. The symptoms, however, were not relieved; and he died next morning.

The veins leading from the wound were found to contain pus, as did those of the bone and the superior longitudinal sinus. Pus and lymph were found also between the dura mater and the bone, in the arachnoid cavity, and among the meshes of the pia mater. The orbital cavity and frontal sinus contained abscesses. There was also secondary deposit in the liver and lungs.

Case VI (vol. xii, p. 169). A man, aged 40, had been an outpatient for a fortnight with a scalp wound which had been phagedænic, and which, on the separation of the slough, exposed a piece of the left temporal bone as large as a crownpiece. He went on well for nine days, when constant sickness came on, accompanied by pain in the head and restlessness. There were no rigors, and the wound looked healthy. This state of things lasted a week, during which time he had cold chills occasionally. On the sixteenth day, the sickness was relieved, but he was delirious at night, and complained of severe pain in the head. On the eighteenth day, he was quite insensible, and completely paralysed on the right side. He was extremely weak. Three days after this, the coma becoming gradually more profound, he was trephined at the seat of injury. Pus was found in the diploe of the bone only. He was not relieved by the operation, and died on the twenty-third day.

At the *post mortem* examination, pus *was* found between the bone and dura mater. The veins of the diploe and superior longitudinal sinus contained pus. Pus was also found in the subarachnoidean space on that side. There were secondary deposits in the lungs.

Case VII (vol. xv, p. 245). A man, aged 28, had a small scalp wound, exposing the bone on the left side, some days previously to admission, and had neglected it. When brought to the hospital he was partially conscious; the wound was discharging profusely; the facial muscles on the right side were paralysed; the left pupil was dilated, and both insensible. During the next two days, the unconsciousness increased, the water and fæces were passed involuntarily. On the fifth day after admission, paralysis of the side opposite to the injury came on. He had had numerous fits, both on that and the preceding day, affecting the muscles of both sides. He was trephined on this day at the seat of injury. Pus was found in the diploe, and a small quantity of pus below the bone, which was rough on its surface. The paralysis and fits continued during the next day, but on the following day these fits ceased and some improvement occurred. On the third day after the first operation, a puffy tumour was observed under the temporal muscle, and on cutting down on this the pericranium was found separated from the bone. The trephine was accordingly applied here, but no matter was found. He survived this last operation five days; the symptoms continued unrelieved, except that consciousness partially returned, so that he would make an effort to answer when spoken to, and put out his tongue when ordered. Shortly before he died, pyæmic abscesses presented in the axilla and elbow.

On *post mortem* examination pus was found in the cerebral vein, and in the longitudinal and lateral sinuses, also between the bone and dura mater, in the arachnoid cavity, and in the meshes of the pia mater to a very great extent.

There were secondary deposits in the lungs, and in the shoulder and elbow joints.

We thus see that in every case in which pus was sought for

by trephining it was found. In all these cases, however, there was the local injury as a guide in the operation, and it is only in the very rare instances, where there is no distinct spot injured, no scalp-wound or fracture, that much hesitation need be felt on this point. The course of the symptoms, the time at which they occur, and the precedence of rigors and other indications of suppuration, sufficiently distinguish between effusions of pus and those of blood or serum, and *à fortiori* do the symptoms differ widely from those of morbid growths. But if the surgeon will be seldom disappointed in his primary object—the discovery of matter—this series supplies a very intelligible reason why his ultimate end is so rarely attained in the preservation of the patient's life. That out of seven successive cases, six should present unmistakeable evidence of pyæmia in other parts of the body, and of phlebitis in the bones and sinuses of the skull, can hardly be considered an accidental circumstance, and will, I fear, go far to show that Mr. Dumville's opinion, as to the relative frequency of limited and diffused suppuration, is not borne out by pathological investigation. I would willingly believe, however, that this may not be so in other parts of the country, where pyæmia, that bane of all operative surgery in our London hospitals, is less rife; and I would appeal to the experience of our country hospitals to correct, if possible, this conclusion.

But it may be said, were these eight cases properly selected for the operation? Were no limited abscesses found after death, in cases which had not been operated on, either above the dura mater, amongst the membranes of the brain, or even in the brain itself? To answer these questions, I refer again to our *post mortem* books; and here I find seventeen other cases, besides the seven which I have detailed above, in which a *post mortem* examination showed the precise condition of the parts.

II. Eight of these belong to our second class, in which matter* was found between the bone and dura mater after death, the skull not having been trephined.

Case I. In one (vol. viii, p. 211), the injury was a scalp wound not exposing the bone. The bone was infiltrated with pus; besides the pus between the bone and dura mater, the tissue of that membrane was infiltrated with pus, and there was matter in still greater quantity in the arachnoid and subarachnoid spaces. The blood in the longitudinal sinus was also thought to contain pus. This was in all probability a case of pyæmia; but the other viscera were not examined.

Cases II and III. Two other cases followed scalp wounds, in which the bone had been exposed. In the first (vol. iv, p. 132), as the spine was fractured, no question of operating could have occurred. The mischief in the head followed an attack of diffuse inflammation. There was pus, both in the circumscribed and diffused form, between the bone and dura mater, and there was suppuration also in the arachnoid cavity. The texture of the brain had a greenish hue in places. The other (vol. v, p. 193) was a case of pyæmia with secondary deposit in the lungs. There was extensive suppuration here between the bone and dura mater; and it was noticed that this suppuration was not in any way circumscribed, although a puffy tumour existed on the scalp. There was also effusion of fluid in the arachnoid and subarachnoid spaces, and abscesses (probably pyæmic) in the orbit.

Case IV (vol. iv, p. 270). The notes of this case during life are wanting. There was, however, slight separation of one of the sutures with exposed bone. A small quantity of pus and lymph was found between the bone and dura mater, and this might probably have been evacuated by the trephine; but a large quantity of pus existed also in the arachnoid cavity; and there were secondary deposits in the lungs.

Case V (vol. vi, p. 158). This was a case of simple fracture, with wide separation of the fragments. To this separation it was probably owing, that though there was a very extensive effusion of lymph and pus between the bone and dura mater along the whole line of injury, there were no very distinct symptoms of pressure, the patient dying of diffuse inflammation. There was pus also in the arachnoid and subarachnoid spaces.

Cases VI and VII. These are cases of compound fracture; in the first case (vol. vi, p. 168), with laceration of the brain and hernia cerebri; and in the second (vol. xiv, p. 168), with loosening of a portion of bone which had been removed. In both cases, therefore, there was free exit for the matter. Both presented matter in the arachnoid cavity, and the latter also in the subarachnoid space.

Case VIII. Lastly (p. xii, 164), we have the same state of things in a fracture of the base of the skull; here there was pus between the bone and dura mater at the seat of fracture, and it extended also into the orbit, and into the tympanum on the affected side; there was also extensive effusion of lymph in the subarachnoid space, and pus in the sinuses. This latter feature renders it probable that pyæmia either existed or was impending.

These were all the cases in which pus existed above the dura mater; in none of them was the suppuration limited to a circumscribed abscess below the bone corresponding to a separation of the pericranium from its external surface, as described by Pott; nay, further, in the only two cases in which anything resembling this "puffy tumour" was seen, although suppuration existed below the skull in both cases, it was not limited in either instance, and therefore would have disappointed the hopes of the surgeon in the second case, had he operated, as it did in the first.

III. Having discussed at such length the relations of suppuration above the dura mater, I do not think I need state equally minutely the appearances in the remaining nine cases, where the pus was situated below that membrane, amongst the membranes of the brain. Suffice it to say, that they tell just the same story. They occurred after the most varied injuries: viz., 1, scalp wound to the bone; 2, scalp wound with linear fracture; 3, 4, 5, fractured base of the skull; 6, compound fracture, with laceration of the brain and hernia cerebri; 7, 8, compound fracture with depression, for which the trephine was applied; and 9, a case in which the skull was trephined twelve months after the injury, for the relief of symptoms dependent on depression of the internal table. In none was the suppuration limited. Some were complicated with abscess of the brain; in some the suppuration was doubtless connected with pyæmia, but in a great number of these cases the head only was examined.

IV. Of the fourth class which I have mentioned, viz., that in which the matter was situated only in the cerebrum itself, no instance occurred except the case (Class I, Case III) in which it was unsuccessfully opened by the trephine.

I have thus endeavoured to give my reasons for believing that intracranial suppuration after injuries very rarely occurs in the limited form, and is, in a great number, if not the majority of cases, only one of the manifestations of pyæmia, accompanied or caused by phlebitis of the veins of the diploe. I have no desire, however, to impugn Mr. Dumville's conclusion, that the trephine ought to be used in such cases, wherever no special contraindication exists: only let us remember that the operation is recommended merely as a *pis aller*, seeing that the disease is, as far as we know, if left to itself necessarily fatal, and that in a few recorded instances the operation has afforded relief.

39, Curzon Street, Mayfair, October 1858.

* I have included cases in which yellow puriform lymph was found, even if it had not yet softened completely into pus. This would obviously have a tendency to make the discovery of *limited* deposits more probable.

REMARKS ON MYALGIA: WITH CASES.

By T. Inman, M.D., Liverpool.

[*Continued from page* 408.]

The subject of myalgia is at the same time so novel and so interesting, that scarcely any apology is needed for keeping it before the notice of the profession. I have already trespassed frequently on the space of this Journal; but new phases are constantly occurring, giving one a greater idea of the extent and bearing of the subject.

Before recording some fresh cases illustrative of important points, let me recapitulate the chief phenomena of myalgic or muscular pains. They have their seat in the fleshy parts of muscles, in their tendinous prolongations, or in the fibrous aponeuroses. The continuous stretching of any white fibrous tissue, from whatever cause arising, will produce a similar pain. Fibrous tissue is more readily stretched in the weak than in the strong; and the process is attended with greater pain. The pain is described as hot and aching, and is commonly attended with cutaneous soreness, and tenderness on slight pressure. Whenever the pain is due to stretching, it is relieved, though not absolutely cured, by relaxation. The pain is independent entirely of the course of nerves, etc., and is not

materially influenced by those constitutional remedies which are useful in neuralgia. I have already recorded instances in which myalgia has been mistaken for hysteria, neuralgia, pleurisy, puerperal peritonitis, disease of the liver, kidney, bladder, or uterus; and scarcely a week passes without my being able to increase this list. The key to the investigations into these complaints is to consider that, as double work in a man of ordinary strength will produce myalgia, so ordinary work will produce a similar effect in those whose muscles are diminished in power to half their normal strength. The presence of muscular pain, therefore, involves either excess of work or want of power: where neither of these causes are in operation, others must be sought.

In giving the following histories, I shall occasionally adopt the conversational style, with a view to show how readily a diagnosis may be formed.

Case I. *General Myalgia.* Mr. H., aged 44, a man of almost herculean proportions, consulted me for pains in the breast, side, back, etc., for "swimming in the head", and liver-disease. As he spoke, he passed his hand in succession over all the large muscles of the trunk, and remarked that the pains never lasted beyond ten minutes in any one place, and that sometimes they were attended with swelling, etc. After myself pointing to the various muscular insertions, etc., and ascertaining those to be the principal seats of pain, the following colloquy ensued:—"Of what business are you?" "In the beer trade." "What is the routine of your day's work?" "Going out for orders, collecting money, etc." "Then you've no hard bodily work?" "None whatever." As it was now clear that the pains were not caused by extra exertion, it was evident that there must be some cause for excessive debility. "Do you drink heavily?" "No; a few glasses of ale a day, and sometimes brandy and water, when the pain is very bad." "Is your appetite good?" "I'll eat as much as the doctors will let me; but they say I am not to eat much, for fear of apoplexy. I'm often giddy when I turn round or stoop; and sometimes I've fallen down. My eyes, too, are apt to get very bloodshot." "But you eat enough to live on comfortably?" "Yes." "Have you lost any blood by cupping, bleeding, or piles?" "No." "Are you much purged?" "Aye, that I am." "How much?" "Often six times before breakfast, and sometimes twenty times a day!" "What's all that for?" "Drs. So-and-so and So-and-so order me medicines for liver-disease, and to keep off apoplexy." "I suppose you feel very weak?" "Aye, that I do; I was so done up, I could scarcely get up your door-steps; sometimes I have fairly to crawl on all fours up stairs to bed!"

In this case the diagnosis was myalgic pains in the various muscles of the trunk, not arising from over exertion, but from deficient power to do his ordinary work. The debility was due to the purging; the swimming head and bloodshot eyes had a similar origin. The pain in the side had not an hepatic origin.

The indications of treatment were sufficiently plain; and steel, cod oil, generous diet, abstinence from aperients, and a daily rest, cured the man completely in ten days of all his symptoms.

Case II. Mr. J., aged 66, who had all his life been an extraordinarily healthy and powerful man, began a short time ago to suffer from complete anorexia and occasional vomiting. He continued, however, to go down to business as usual. This continued for about six weeks; during which period he became extremely feeble. He now began to suffer from constipation, and allowed the bowels to remain unopened for three days. They were not relieved without great abdominal straining; and on the same day, he had an unusually protracted fit of vomiting. The day following, the pain in the abdomen was so severe, that he was under the impression that he was threatened with gout in the stomach. The vomiting continued; and the pain, at first diffused, became settled in two localities, and was so intense, as almost to make him faint when he sneezed or coughed. At this period, I was summoned to attend him. I found that there was exquisite pain and tenderness on pressure on each side of the pubis at the insertion of Poupart's ligament and the linea semilunaris. The pain shot down to the scrotum; and the testicles were forcibly drawn up during its continuance. There was no hernia, nor sign of organic disease. I explained to the patient the real nature of the pain, and its dependence on a strain upon the tendons greater than they were able to bear. I recommended the local use of a solution of atropia, and complete rest in the recumbent posture, with champagne to relieve the sickness. These means were successful; and in two days the patient again contrived to get to business, though the soreness continued for a week. In this instance, the tenderness was confined to as small a spot as it is in pure inframammary pain.

Case III. Mary C., aged 19, a slight made girl, of consumptive family, came into the Liverpool Northern Hospital, complaining of severe inframammary pain. On requesting her to place her finger on the part, she immediately indicated a spot apparently corresponding to the upper insertion of the right linea semilunaris. "But you have pain in other places besides that?" I inquired, passing my hand over the origins and insertions of the trapezius, pectoral, external oblique, and the extremities of the rectus abdominis. She had or had had pain in every spot I touched. "Now, of what business are you?" "A milliner." "What are your hours?" "From nine in the morning to nine at night." "Do you work on Sunday?" "No!" "How are you on Monday?" "Always better?" "The pain goes when you lie down?" "Yes, always; but *it comes on again whenever I turn round in bed.*" "You have not had the pain long?" "Two months." "But you've been a milliner for longer than that?" "Yes." "And your hours have been always the same?" "Yes." It was clear, therefore, that some cause for debility was to be sought. A few inquiries elicited that for the last three or four months she had been suffering excessively from leucorrhœa. The catamenial function was regular. Rest in bed, tonics, and astringent injections, set her up again in about three weeks.

A propos of this case, I cannot help adverting to a paper read by Dr. C. Coote, at the Harveian Society of London, and reported in the British Medical Journal, June 19th, 1858, in which an attempt is made to show that the pain in question is a pure neuralgia. It is in medical science a matter for regret that there should be so strong a tendency to put down a mysterious pain to some equally mysterious operations of the nervous system, and to pass by perfectly adequate explanations, because they are so simple. Look, for example, at the following explanations by Dr. Coote:—"True inframammary pain is a peripheral neuralgia, having its (probable) origin in malnutrition of the nerves of the part. This, again, results from disordered circulation, affecting the left inframammary region especially, by reason of its peculiar anatomical relations. The immediate cause of this vascular derangement consists in disordered innervation of the smaller arteries of the whole body, occasioning irregular spasms and dilatations of their walls—a condition which, while in the inframammary region it occasions neuralgia, in other parts gives rise to chills and flushes, to palpitation, to excessive or defective secretion, to congestions, hæmorrhages, and fluxes; while an analogous state of the motor nerves of the alimentary canal produces obstinate constipation." What a "darkening of counsel with words without knowledge" is here! How much more simple is it to say that the pain depends upon a prolonged strain upon the tendinous or fibrous portions of the abdominal parietes, which is greater in some parts than in others, according to the position commonly adopted by the patient; that it is relieved by every position which relaxes the strain, and *vice versâ;* that it is attended with similar pains elsewhere; and further, that the constipation, flushes, cramps, palpitation, etc., which accompany inframammary pain, are nothing more than evidences of general debility affecting other organs of the body as well as the muscular system.

The main question between neuralgia and myalgia must ever be (until at least the new word becomes domesticated in medicine), Can stretching of the white fibrous tissue produce an amount of pain comparable to that of genuine neuralgia? In other words, Is it possible for severe suffering to have other than a purely nervous origin? Any one who wishes to answer this question for himself should straighten the lower extremities, and then attempt to touch the ground with the tips of the fingers; noting at the time the sensations in the popliteal region. If he wish to observe a similar pain in woman, let him note the intense agony complained of in the sacro-sciatic region during the time the head is passing through the pelvis during parturition. The following case will give another illustration of the same fact.

Case IV. Mary J., aged 19, of consumptive parentage, came into the Liverpool Northern Hospital with all the symptoms of caries of the spine. The disease was in its early stage, however; and there was no gibbosity. There was no local pain, nor tenderness on pressure. As the case proceeded, the patient complained of gradually increasing pain, which was at last sufficiently severe to prevent her sleeping without opiates. The part affected was now gibbous, and the pain was entirely

referred to the spinous processes; and the suffering was due solely to the stretching of the interspinous and other ligaments. It was relieved by the local use of belladonna and opiates, but nothing removed it entirely. The patient is still under observation.

The pain from varicose veins is equally due to the unusual stretching of their white fibrous tissue.

The following case shows another phase of myalgia of equal interest with the preceding.

Case v. Jane C., aged 20, was admitted into the Northern Hospital with a painful tumour in the side. She was tall, slim, and delicate looking; and complained of pain referred to the right inframammary region. On making an examination of the abdomen, a swelling with a well defined margin was recognisable, extending from the ribs to the crest of the ilium on the right side; but it was clear that this was due entirely to a permanently cramped condition of the external oblique. She had pain at the insertions and origins of all the abdominal and thoracic muscles, and in the gluteal region also. A few questions elicited that she was the servant of a washerwoman, and that she was occupied at least six hours daily in working the "dolly"; that she had been able to do her business very well until a short time back, when she had been pulled down by leucorrhœa, menorrhagia, loss of appetite, and indigestion. Tonics, rest, and anodyne frictions were prescribed; and the woman discharged herself as cured in ten days. Two years afterwards, she came in once again under the same circumstances; and was again discharged cured.

Notwithstanding the foregoing explanation of this class of pains, there is still a strong disposition on the part of practitioners to regard them as hysterical, and to associate them in some manner or other with the uterus, or the excitable disposition so constantly attributed to females. It is advisable, therefore, to show that they are by no means confined to the gentler sex, and are to a great degree independent of the nerves.

Case vi. Francisco B., aged 35, an Italian Swiss, was admitted into the Liverpool Northern Hospital with chronic dysentery. We ascertained that he had been in Australia at the Gold Diggings; that he had been taken with his present disease twelve months prior to his admission; and that he had never left his bed since. He was carried on board ship, and thence again to the Hospital. On admission, he was excessively emaciated and weak. At the end of six weeks, he began to recover; and in about a month more the dysentery was quite cured, and he was able to sit up in bed. Up to this time, he did not complain of pain; but as soon as he was sufficiently well to dress himself, he complained of severe suffering referred to the abdominal walls, accompanied by tenderness on pressure. This continued for many hours every day, and always drove him to bed. Nevertheless, he gained flesh and strength daily. Anodyne frictions relieved him to a small extent; but some weeks elapsed ere he was able to sit up and walk about all day without pain. There could be no pretence here that the pain was neuralgic or hysterical; it was clearly due to the unusual strain thrown upon muscles that had long been all but inert; and it did not differ in the smallest degree from that so common amongst women.

Case vii. At the same time another patient in the same ward complained of abdominal pain, which he referred chiefly to the hypochondriac regions and the epigastrium. In describing it, the man placed both hands on the spot corresponding to the inframammary region in the female. The case had been one of simple fever, of course implying great debility; and the man got up too soon, and remained up too long. He was instructed accordingly, and soon ceased to complain. Two days before he left, however, he stated that the suffering exceeded any thing he had previously had. But the nurse of the ward, who is now very familiar with the nature of these pains, at once explained this, by saying, that he had been out of doors, and that he told them he had been having a "hard run"!

The next is, if possible, a more instructive case; inasmuch as it shows how very trifling an amount of exertion is enough to produce these pains in weakly subjects.

Case viii. James C., aged 64, was admitted into the Hospital for simple rheumatism, under the care of my colleague. The rheumatic pains speedily gave way, but he remained in the house to regain his strength. In the absence of my colleague, he came under my notice. When I saw him at first, he was in bed, had an unhealthy aspect, and total anorexia. I could detect no organic disease. By and by, he began to sit up, and to complain of constant abdominal pain, referring it chiefly to the hypochondriac region. He never had the pain when lying down; it was, however, severe if he tried to turn round in bed. It was clearly myalgic, and was treated accordingly; nothing, however, did him any good until under the influence of steel and cod oil, the appetite improved, and his natural strength augmented.

I find that these pains are extremely frequent in consumptive cases, and in those who, though not actually phthisical at the time, have inherited a consumptive diathesis. In them the right shoulder is the most common seat of pain; the suffering being sometimes referred to the insertion of the trapezius muscle, and sometimes to the origin of the pectoral, according to the uses to which the arm has been put.

It is a very common thing to find young and delicate mothers, who have much to do in carrying their infants, suffering from this affection—especially while they are suckling; for at that period they are doing a more than common amount of work, and experiencing a steady reduction of power to do it. I have had many instances of this under my notice lately, of which the following is a good example.

Case ix. Mrs. T., aged 33, of delicate complexion, but of healthy family, mother of five children in eight years, had been confined about two months, when she began to suffer severely from pain under the right clavicle and in the right groin. As her appearance was eminently calculated to give rise to a suspicion of phthisis, the former was considered as an indication of that complaint, while the latter was attributed to inflammation of the ovary. On examining her, I could not detect any physical signs of disease of the lungs; but her appearance, and the description she gave of herself, indicated an extreme amount of debility. She had even found that one month's nursing, during which she had been for the most part on the sofa, was too much for her; and after this, when she had begun to fulfil her ordinary household duties, she had found herself quite "done up." As she could afford little assistance, she had the care of the baby almost exclusively, and nursed it upon her right arm. The pain was not severe in the morning generally—the parts were only sore; but towards evening she was unable to continue her nursing without great suffering. The pain in the groin was always worst at night, and was reproduced by turning in bed and lying with the body quite horizontal. Sometimes she had a "lump" in the abdominal walls. In this case the diagnosis was very easy; it was clear that the pectorals, deltoid, and trapezius were overworked in nursing the baby; that the external oblique and other muscles of the right side of the abdomen were equally tasked, the effect of the fatigue being chiefly felt by Poupart's ligament. The plan of treatment was equally clear; less nursing, full diet, tonic medicine, and a greater amount of rest.

I have, in previous communications, adverted to the fact that it is not common to find that both insertions of a muscle suffer equally. That it is really so, farther experience proves, though it affords no adequate explanation of the reason why. Thus, from excessive cough, one patient refers the pain to the origin, another to the insertion of the pectoralis major and minor; one sempstress refers all her pain to the occipital, another to the spinal, another to the scapulo-clavicular attachment of the trapezius. One refers her pain to the inframammary, another to the inguinal, and another to the semilunar attachment of the external oblique. One refers her suffering chiefly, if not entirely, to the pubic, and another to the epigastric attachment of the rectus; while others refer their complaints equally to all these spots simultaneously or in succession. Another curious fact, of which I have more recently convinced myself, is, that the myalgic pain produced by prolonged stretching of muscular or tendinous fibres will occasionally pass away without there being the smallest relaxation of the tension. We are not in a position to explain this, nor can we expect to do so until we have some satisfactory information upon what muscular "stiffness" and soreness depends. Experience tells us that a horse will often be lame and halting until he "warms to his work," and that many a pedestrian, who is sore and stiff at starting, becomes comfortable at the end of his first hour. Reason, therefore, would suggest that a good deal of the suffering arising from prolonged stretching might arise from deficiency of circulation in the part—a conclusion strengthened by the facts that stretching a part must diminish the calibre of all its longitudinal tubes—and that warmth will relieve myalgia quite as effectually as exercise. But until we have more definite grounds to go upon, it will be judicious to avoid theoretical explanation, and I therefore content myself with giving the foregoing for as much as they are worth.

Clinical Lecture

DELIVERED AT

UNIVERSITY COLLEGE HOSPITAL.

BY

JOHN ERICHSEN, Esq.,

PROFESSOR OF SURGERY IN UNIVERSITY COLLEGE, AND SURGEON TO THE HOSPITAL.

NÆVUS.

Gentlemen,—Nævus is, perhaps, the most common congenital malformation or disease requiring surgical interference, and probably the most frequent cause of operations on young children. The methods adopted by surgeons for the removal of this affection are very varied; but however much they may differ in detail, they are all referrible in their mode of action to one of three principles, viz., 1. Those means, such as the seton, subcutaneous section, vaccination, and the injection of various astringents, which act by exciting inflammation, and eventually induce plugging and obliteration of the vascular network that constitutes the nævus. 2. Caustics, the electric and the actual cautery, which act by destroying the morbid structure. And, 3. Its removal by means of the knife or ligature. Now it is not my intention to-day to enter upon a general description of these different methods of treatment, but my object is to endeavour to point out to you how they require to be modified according to the situation and nature of the nævoid growth. Instead, therefore, of discussing those *principles of treatment* which are applicable to nævus generally, I will endeavour to render the subject more simple and practical by bringing before you cases and observations illustrative of the treatment of nævus, according to the region it occupies.

Nævi of the Scalp are more frequent than in any other situation, except, perhaps, the face. When occurring on those parts that are covered by hair, they are almost invariably prominent and subcutaneous; when seated on the forehead, or on the bare skin behind the ears, they are often cutaneous. The ordinary subcutaneous nævus of the scalp is readily removed by the application of the quadruple ligature. In performing this little operation, it often becomes a question as to whether any of the integument covering the growth should be preserved. In general, I think it better not to attempt its preservation. It is true that when removed, a clean white cicatrix is left which never covers itself with hair; but this contracts, and in after-life becomes but little visible. If you attempt to dissect down the skin that covers the nævus, you will find the operation not only troublesome, but attended by a very considerable, and possibly a dangerous amount of hæmorrhage. Those flat nævi that are situated behind the ear are here treated, as in the case at present under my care, by the free application of the fuming nitric acid.

Nævus of the Fontanelle is the most important variety of the scalp nævus, and constitutes a somewhat formidable disease. You see, as in the case of a child nine months old which we lately treated, a large purple tumour situated within the anterior fontanelle, rising and falling by the pulsations of the brain communicated to it, and becoming distended and tense when the child cries. The tumour is evidently close upon the membranes of the brain, and may be looked upon almost as an intracranial rather than a scalp tumour. The close proximity of the tumour to the brain and its membranes often deters practitioners from interfering with it; and I not unfrequently see cases in which the parents of the child have been counselled not to allow any operation to be practised, lest death should result. But yet this tumour, so formidable in appearance, and so deeply seated, close upon the brain, and as it were within the cranium, may be removed with the most perfect safety by the ligature, if you know how to apply it. I have often tied nævi in this situation, and have never seen any ill consequences, nor even a convulsive fit, occur. The danger, then, from the mere strangulation of the tumour in this situation cannot be great; but there is another and a special danger, viz., the risk of wounding the membranes of the brain in passing the ligatures under the base of the tumour. Now, I need scarcely say, that if you use nævus-needles, or sharp pointed instruments of any kind, this accident would be very likely to occur; you could not tell whether or not, in dipping down the needle, you had included a portion of the dura mater; and, if this were to happen, inevitably fatal consequences must ensue. However, this accident may always be avoided by operating as you lately saw me do in the case of a child eight weeks old, with a large purple nævus in the anterior fontanelle. A puncture was made in front of the tumour through the healthy scalp. An eyed probe, armed with a double ligature, was then pushed through this opening across the base of the tumour, and its end made to project on the opposite side beyond it; here another puncture was made, and the probe and ligature together were drawn through. The same procedure was adopted across the tumour sideways. In this way, a quadruple ligature was passed across the tumour in two opposite directions; the ends were then disengaged, and the ligature tightened in the ordinary way. Complete strangulation ensued, and the child was well in a fortnight, without a bad symptom.

Nævi of the Face are of very common occurrence, and usually cause so much disfigurement that their removal by surgical means requires to be undertaken whenever it is practicable. The treatment to be adopted necessarily varies greatly, according to the nature of the nævus, whether cutaneous, subcutaneous, or both, and especially according to its situation. The same plan, which may be advantageously adopted in one part, being altogether inapplicable in another. We shall, accordingly, consider the treatment of these vascular growths, as they affect the eyelids, the nose, the cheeks, and the lips.

Nævus of the Eyelids is usually cutaneous, consisting of a discoloration or staining, as it were, of the lid, without any material swelling of it. Such a disease is, I think, better left untouched; it cannot, of course, be removed either by the knife or caustics, without producing worse results; and, as the skin is always deeply involved, milder means are inoperative, or possibly equally destructive. I have heard of sloughing of the eyelid being occasioned by the use of astringent injections in such cases; though, if the nævus were subcutaneous, and constituted a distinct tumour, passing perhaps into the orbit, injection with the perchloride of iron might advantageously be adopted.

Nævus of the Nose may occur in two situations—at the root, or towards the alæ and apex. When seated at the root of the nose, upon the bridge, or at the lower part of the forehead, between and perhaps extending above the eyebrows, it is often subcutaneous, and may attain a very considerable magnitude. In such cases as these, I have found the quadruple ligature the readiest means of removal; and, although the part included may be of large size, you will find that the resulting cicatrix is wonderfully small and narrow, usually becoming horizontal, so as to fall into the folds of skin naturally existing in that situation. In the case of a little girl about three years of age, brought to me last autumn by my friend Dr. Gerber, I removed a nævus that was cutaneous as well as subcutaneous, and as large as a walnut, from this situation, by means of the quadruple ligature, with the most satisfactory result, the resulting cicatrix being remarkably small; and you have lately had an opportunity of seeing in a little girl, from the bridge of whose nose I removed, about a year ago, a nævus as large as a marble, how little scarring or deformity results. In both these cases, the nævus was cutaneous as well as subcutaneous. If the skin is not affected, then injection with the perchloride of iron may be advantageously employed in such cases. When the tip and alæ of the nose are affected, the nævus being cutaneous, we can seldom do much to improve the appearance of the patient. In such cases, I have tried breaking down the nævus, the use of injections, and the galvanic cautery, without any material benefit.

Nævi of the Cheeks may occur in three distinct forms—1. As a simple cutaneous nævus, a mere staining of the skin, "a mother's mark". This admits of no treatment, and the subject of it must submit to continue through life to exhibit the characteristic discoloration. 2. The elevated cutaneous nævus, raised above the surface, and of a deep purplish red or plum colour, covered with a very thin integument. In this form of the disease, I think that the application of the concentrated nitric acid is the best means of extirpation. By one or two free applications of the caustic, the nævoid growth is removed, and a dense white cicatrix, presenting little disfigurement, is left in its place. 3. The nævus may involve the whole thickness of the cheek, being scarcely, if at all, cutaneous. Such nævi as these cannot, of course, be extirpated, either by the knife, ligature, or caustics, lest the cheek be perforated, and the most serious dis-

figurement ensue. In such cases as these, we must endeavour to obliterate the structure of the nævus by exciting inflammation in it by means of setons, or by breaking down the structure of the growth with cataract-needles or a fine tenotome. In a case which I attended some years ago, with my friend Mr. Bartlett of Notting Hill, a large and deep seated nævoid growth, which occupied one cheek, was cured by having a number of fine silk threads passed across it in different directions, and then gradually, piece by piece, being broken down with a cataract-needle, no disfigurement whatever being left.

Nævi of the Lips require different treatment, according as they occupy the margin or have involved the whole substance of these parts. When seated at the margin, as projecting and somewhat pendulous growths, they may very readily be removed by a double or quadruple ligature, according to their size; but when they involve the whole thickness of the lip, such measures as these are not available. If deeply invading the substance of the lip, an operation similar to that for the removal of a cancroid growth might be practised, the whole substance of the lip cut through widely on either side of the disease, and the incisions brought together with hare-lip pins. Such an operation is only practicable when the disease, though deeply seated, does not spread to any very great extent laterally. When it does, the whole of one-half of the lip, for instance, being involved, the use of the knife, especially in young infants, would be too hazardous, on account of the probability of serious hæmorrhage; and other means must be had recourse to. I have tried the use of setons, and of injections with the perchloride of iron; but not with any advantage. When the whole substance of the lip is involved, inclusion and strangulation of the morbid mass by means of the ligature is seldom available; the amount of sloughing being very great, and the child, absorbing the putrescent matters from the sloughy mass which results, incurring the danger of being poisoned from this source. In an infant with a very large nævus including one-half of the lip, and which I ligatured at the hospital some years ago, death appeared to result from this cause. One of the most formidable, and in its results the most satisfactory case of nævus of the lip that I have ever had to do with, was sent to me about three years and a half ago, by Dr. Budd of Barnstaple. The patient, a little girl five months old, was noticed at birth to have a red streak on the right side of the upper lip; this rapidly developed into a large tumid purple nævus, which, when the case came under my observation, was about the size of a large walnut, involving the whole of the structures of the lip, from the cutaneous to the mucous surfaces: it was of a deep mulberry colour, and extended from the median line of the lip to the angle of the mouth. The integuments covering this growth were exceedingly thin, and the tumour itself in the highest degree vascular and active. What course was to be adopted in eradicating such a tumour as this? Excision appeared to be out of the question, on account of the extent of tissue involved, the early age of the child, and the probability of profuse and possibly fatal hæmorrhage. The ligature, from the experience I had had in a similar case, presented little to recommend it. Injections with the perchloride of iron and the introduction of setons were successively tried, but neither of these means produced any effect on the tumour, which commenced to extend upwards into the nostril. I accordingly determined on using caustics. Nitric acid was first employed; but, as this did not produce sufficiently deep impression on the growth, I had recourse to the potassa cum calce. By means of this powerful escharotic, the tumour was gradually removed; the hæmorrhage which occasionally resulted being restrained by pressure. Notwithstanding the amount of tissue destroyed, the resulting cicatrix was small, resembling that of a badly united hare-lip. I advised the parents to leave this for some years, and then, if it had not materially improved, proposed to excise it, and bring the opposite sound edges together by a hare-lip operation. A few weeks ago, the child was brought to me again, and I was much struck by the wonderful improvement that had taken place during the three years that had elapsed since the removal of the nævus. The lip is smooth, the cicatrix in a great degree worn out, and comparatively little disfigurement is left in the countenance of an exceedingly pretty and engaging child. Finding, however, that the lip was still drawn or tucked in by a very dense band of cicatricial tissue, which caused a depression of the ala on that side, I divided this, and the result has been of the most satisfactory character.

Nævi on the Organs of Generation are occasionally met with in the female, but rarely in the male. The only instance of *nævus on the penis* that I have met with occurred in the case of a gentleman thirty-two years of age, who consulted me about three years ago for a growth of this kind, as large as a walnut, situated under the reflexion of the preputial mucous membrane. It had existed for many years without giving any annoyance, but, having of late begun to enlarge, and occasionally to bleed, he was desirous to have it removed. This I did by applying the quadruple ligature, after having dissected down the mucous membrane. *Nævi of the vulva and pudendum* are by no means of very unfrequent occurrence. We have had several instances of this kind in the Hospital of late years. They are usually of a venous character, often attain a large size, and may sometimes involve the integumental structures on the inside of the thigh, or on the perinæum, as well as the vulva. When the growth is confined to the vulva, it is best removed by the ligature. Some time ago, I removed in this way a large venous pendulous nævus, as large as two or three flattened walnuts, from the left labium of a little girl six years of age. In this case, I found it most convenient to employ the continuous ligature. The same means were had recourse to in order to extirpate a large nævus from the labium of a child three years of age; but in this case the disease extended to the integuments of the perinæum and inner side of the thigh, and was here removed by the application of strong nitric acid, after the larger growth had separated.

On *the Extremities, Neck, and Trunk*, every possible variety of nævus occurs. When the disease is flat, consisting rather of staining of the skin than of any actual tumour, it may commonly be treated successfully by the application of the strong tincture of iodine; or, should it be thought desirable to remove it, this may be effected by rubbing it with strong nitric acid. If the nævus assume the form of a tumour, it will almost invariably be of a venous character, and then removal by means of the ligature should be effected. If the growth is round, the ordinary quadruple ligature may be employed; if flat or elongated, the longitudinal continuous ligature is preferable.

Nævoid Lipoma. Before concluding, I would draw your attention to a form of nævus that I have occasionally met with, but which does not appear to have attracted much notice, although I find that M. Nélaton speaks of it: I mean a tumour in which the nævoid structure is conjoined with or deposited in a cellulo-fatty mass—a kind of "nævoid lipoma", in fact. I have seen several cases of this disease, which has invariably been seated upon the nates, back, or thigh. It occurs as a smooth, doughy, indolent tumour, incompressible, not varying in size or shape, without heat, thrill, or pulsation of any kind, possibly having a few veins ramifying over its surface, but no distinct vascular appearance. It is usually congenital, or has been noticed in early childhood; and continues without any very material change in shape, size, or appearance, until the inconvenience or deformity occasioned by it requires its removal. This is best effected by the knife. After removal, the tumour will be found to be composed of a cellulo-adipose basis, having a large number of veins ramifying through it, so as to constitute a distinct vascular element, communicating with small cysts containing a bloody fluid. The situation in which I have seen such tumours occur, where they gave rise to most inconvenience, and where their removal has required the greatest care, has been the anterior part of the thigh, just below Poupart's ligament, close upon and almost in connexion with the femoral vessels. In a case of this description, which was sent to me last autumn by my friend Dr. Edwards of Antigua, the patient, a gentleman of that island, had suffered from a chronic solid œdema of one of his legs for some years, apparently dependent upon the pressure that was exercised upon the saphena and femoral veins by an elongated indolent tumour just below Poupart's ligament, and over the course of these vessels. This tumour had existed from childhood, and presented the signs that have just been given as characteristic of the disease under consideration. It was removed by an incision parallel to Poupart's ligament, some careful dissection being required to separate it from the femoral sheath, more particularly towards the inner side, where a prolongation of the tumour dipped down by the side of the femoral vein, doubtless compressing that vessel, and so disposing to the occurrence of the œdema of the limb. After removal, the tumour was found to consist of a mass of condensed cellulo-adipose tissue, with much vascular structure intermixed, and some small cysts. The œdema gradually subsided, and when the patient left England, about three months after the operation, the limb had nearly regained its normal size, being but little larger than the sound one.

Transactions of Branches.

BATH AND BRISTOL BRANCH.

CASE OF MOLLITIES OSSIUM.

By John K. Spender, Esq., Surgeon to the Eastern Dispensary, Bath.

[*Read September 30th.*]

The following case is imperfect, from the absence of a *post mortem* examination; but it is a good illustration of a rather rare disease.

Miss O., a maiden lady about 50 years of age, came first under my care in April, 1856. She was then suffering from what appeared to be sciatica in the right thigh; and her history was, that one day in the autumn of 1854, a sudden pain seized her while taking a long walk: that she was obliged to be carried home, that the pain persisted and increased, and in the course of a short time was accompanied by progressive inability to move the limb. In this way she continued for a year and a half, without getting very decidedly worse, and submitting to various plans of treatment, homœopathic and hydropathic, with scarcely any alleviation of the symptoms.

When I saw Miss O., in April 1856, after an interval of two or three years, she was much emaciated, and looked feeble and worn; she complained of a dull and almost constant pain at the back of the right hip, with an almost total inability to walk, except when supported by another person. The pain was always relieved by rest in the recumbent posture. The general health was much affected; sleep was disturbed, the appetite was diminished, and the bowels confined.

A physical examination detected a projection corresponding to the third lumbar vertebra; it was about equal in degree to that which is associated with a slight angular curvature of the dorsal spine. There was nothing remarkable about the hip, except that the muscles were very much wasted; and the bony prominences of the pelvis and hip were proportionately conspicuous. There was no distortion of any of the long bones; the spine was straight in the whole of the upper portion; and although the dimensions of the pelvis seemed small, yet this might be partly due to the emaciation of the muscular and fatty coverings.

Previous acquaintance with my patient had informed me that she was one of a gouty family. None of the objective symptoms of the gouty diathesis were present; and it was more a guess than a diagnosis to denominate the malady a gouty neuralgia of the sciatic nerve. At that time, however, there was no indication, beyond the protrusion in the lumbar spine, that the neuralgia depended on a physical lesion. The thoracic organs were healthy; the skin was usually harsh and dry; the urine was abundant, and rather alkaline, but never at any time presented much departure from the normal condition.

The first thing I did in the way of medicinal treatment was to clear the bowels by a purgative, composed of hydrargyrum cum cretâ and croton oil. This afforded much relief to pain for two or three days; and the dose was repeated, with a similar result, at brief intervals. No permanent alleviation being produced by this method, I determined, about the middle of June, to give mercury to salivation; and three grains of blue pill were accordingly administered three times a day. The resulting ptyalism was attended with a most beneficial effect, as far as the pain was concerned; but the relief was as transient as before. At the end of June, having tried various forms of local counterirritation, I introduced an issue over the course of the sciatic nerve, and kept it open for several months. This was succeeded by a blister, and by nearly every possible combination and permutation of so called sedative and narcotic appliances.

The internal remedy which superseded all others in special value was morphia. Half a grain of the acetate of morphia was given, at first, every evening; and this dose was gradually increased until the maximum quantity of seven grains in the twenty-four hours was attained. This enormous amount of opium was consumed without any approach to narcotism beyond one or two hours sleep by day, and tolerably undisturbed rest by night.

It would be wearisome, and it is really quite unnecessary, to follow all the details of the case, either pathologically or therapeutically; but in the summer of last year, there was such a sudden and marked aggravation of all the symptoms—pain in both hips, and extending sympathetically to the knees, great œdema of the feet and ankles, extreme general emaciation, dyspnœa, with excessive loss of strength—that I became much alarmed, and Dr. Davies saw the case with me in consultation.

The projection already spoken of in the lumbar spine had now considerably increased, and so seriously interfered with the functions of the spinal cord, that a paraplegic condition was immediately threatened. Other grave points were noticed, as the falling in of the bones of the thorax and pelvis, and an incipient distortion of the long bones. It was clearly a hopeless case; and all that could be done was to advise the most nourishing foods, and specially those articles of diet containing sugar and fat. With this view Dr. Davies recommended a wineglassful of fresh cream twice a day. Alcoholic stimulus was also freely given. A particular form of arm-chair was devised, which, to a certain extent, took the weight of the upper extremities from the yielding spine; while the use of the water cushion, both by night and by day, prevented the formation of sores on the back.

One afternoon, at the end of August last year, my patient was seized, while sitting up, with the most terrible dyspnœa and palpitation of the heart. Fortunately, I was close at hand; and I believe that it was only by immediately giving her half a bottle of port-wine that she was saved from dying on the spot. I got her to bed, telegraphed for her nearest relatives, and kept her alive for just three days by the unremitting administration of brandy, ammonia, and beef-tea. She died at last in a quiet manner, as if she had only fallen asleep.

An external *post mortem* view of the body revealed a state of emaciation to which I have never seen any parallel. The terms "skin and bone" more literally defined those relics of mortality than any other words could do; for nearly all muscular structure seemed to have vanished, and many of the bones themselves were incurably diseased. The proximate cause of death appeared to be a collapse of the thoracic walls. All the bones which contribute to form the thoracic cavity were distorted to an extraordinary degree; the clavicles were reduced to miniature fragments shaped like a Z, and allowed the shoulders almost to meet; the sternum was arched up like a bow, the convexity being outwards; and the ribs had fallen in from the loss of their sternal support. The vertebral column was twisted laterally, like the letter S. The hollow of the pelvis was reduced by a collapse of the pelvic walls; while the abdominal parietes were greatly distended, owing probably to the thoracic and pelvic viscera being pushed into the abdominal cavity. The bones of the thighs and upper arms were considerably bent out of their normal shape; but the distortion did not extend to the other parts of the extremities, or to the bones of the face and skull.

Remarks. It may be proper to remark before closing, that although the chief visible feature of mollities ossium is atrophy, the essential change is a fatty degeneration of the osseous texture. "The loss of earthy matter is both rapid and great; and the bones come to consist almost entirely of oily matter held in membranous tissue." Mr. Stanley observes that in this disease the bones are of their natural bulk and proportion; and Mr. Miller notices the chief points of diagnosis from rickets, inasmuch as in the latter the osseous structure is abnormal from the first, or at all events from a very early age. In rickets, the softening and flexion are slow and gradual; while in mollities ossium the morbid progress is rapid, and distortion may be both instant and great. Further, in rickets, an improvement may be hoped for; but in mollities ossium there is no amendment either of the health or of the skeleton, and the disease always proves fatal. All that can be done in the way of treatment, is to palliate the more prominent and distressing symptoms.

Discussion. Dr. Davey gave the particulars of a case which came under his notice in 1842, at a lunatic asylum. The pains were excessive, and the patient required opium in drachm doses to obtain relief. The urine was stated to be frequently loaded with phosphates in this disease; but in the case referred to, it was healthy. On *post mortem* examination, extreme distortion was found; there were six fractures of the long bones. Nothing appeared to give so much relief as pads or cushions to meet the various postures assumed. As regarded the intrinsic nature of the disease, it was doubtless something more than mere absence of earthy materials—something specific, and not as yet distinctly ascertained.

Mr. Godfrey inquired if the employment of phosphates was of any avail in the treatment of the disease?

Mr. Swayne said that they had not been found of any use; in the case read to the meeting, there had been no inflammatory symptoms, as was usually the case.

Dr. Davies observed that the practical point of importance was to ascertain if the disease could be recognised in the earlier stages, as, when advanced, its effects on the whole constitution were so severe, that any plan of treatment with a view to effect a cure appeared useless.

Dr. Fox referred to the importance of chemical analysis, and to the analysis of urine in this disease which had been made by Dr. Bence Jones. The fæces should be particularly examined. The protein compounds would probably abound in the urine.

Introductory Lectures.

ST. BARTHOLOMEW'S HOSPITAL.

The introductory lecture was delivered on October 4th, by Mr. Holmes Coote. Among the auditory were Alderman Sir George Carrol, the President and Registrar of the Royal College of Physicians, the Government Inspector of Prisons, the medical and surgical staff and the Treasurer of the Hospital. The lecturer commenced by welcoming those gentlemen who were about to begin, as well as those who were to resume their professional studies within the walls of that Hospital, which was connected with so many interesting historical associations. For (continued the lecturer) we stand upon no common spot. There was a time, indeed, ere civilisation first flowed to these shores in the shape of Roman legions, when Smithfield was but a grassy mound, occupied by a few huts, and surrounded by boundless forests, through which ranged undisturbed several species of wild cattle, now extinct. Subsequently, under the Saxon rule, it became the selected abode of those religious foundations, to whose fostering care was entrusted during a period of turbulence all that remained of arts, of literature, and of science. The lecturer passed an eulogium on Rahere, the founder of the institution, whose name remained respected wherever civilisation had extended and medical and surgical science was appreciated, whilst the names of the fierce barons who were his associates had mostly passed into oblivion. Confiscation had deprived the endowment of many a broad acre; the priory had crumbled into ruins; but yet the Hospital remained, distributing its benefits with an equal hand—though civil and religious warfare had raged, and armed multitudes had crowded about its walls, whilst dynasties had tottered and fallen—a memorable instance of the imperishability of a good deed. After congratulating the friends of education upon the altered and greatly improved curriculum of the examining bodies, he alluded to the prize system, which he denounced in strong terms, as a most uncertain test of general knowledge. He then approached a very unpopular subject, the Christmas Vacation, which he stated it was the intention of his colleagues, on the recommendation of the Council of the College of Surgeons, to abolish.

The lecturer then alluded to those gentlemen educated at St. Bartholomew's who had distinguished themselves in the public service, particularly the Surgeon-Major of the Scots Fusilier Guards, Mr. J. A. Bostock, son of the distinguished physiologist, who, after leaving the hospital, entered on the service of his country, and was present at the deadly conflict with the Sikhs, and returning to England was, on the war in the East, again sent with his regiment to the Crimea, and was present at the ever memorable battles of the Alma and Inkerman, and finally returned to England with shattered health, but with a breast covered with decorations worthily gained on the field.

In conclusion, he alluded to those senior members of the profession now engaged in upholding the honour, dignity, and welfare of the medical profession.

SYDENHAM COLLEGE, BIRMINGHAM.

The introductory lecture was delivered by Dr. Alfred Hill. There was something in the inauguration of an academical session alike interesting to the professional man and to the student; recalling to the mind of the former the time when he first listened to an introductory lecture, and the feelings with which that event was associated; the consciousness, amongst other things, for instance, that he was then commencing in reality the battle of life, and in the strength and buoyant hopefulness of youth, not feeling dismayed by the difficulties of the work before him, but seeing in it only a glorious arena for the exercise and display of faculties in full vigour, and eager for action in a field prolific of objects desirable to be attained. To the students who were this day commencing their career of medical education, the same field was open; and while it was desirable they should commence their labours in full confidence and hope, they must at the same time be impressed with the importance of the step in life which they were then taking—a step not to be taken lightly and without serious consideration upon its responsibility. Dr. Hill then dwelt upon the necessity of morality and the cultivation of good habits during youth as the only means of obtaining a good position in after-life; and said his confirmed opinion was, that those who pursued the opposite course would certainly fail in the attainment of an honourable position among their fellows, and also in those objects which all were doubtless anxious to secure. It would be his object, in the remarks he was about to make, to give the students an outline of the nature and the mutual relation of the scientific subjects which would claim their attention, and to tender them that counsel which would be calculated to assist and direct them in the prosecution of their studies. They must not allow the long list of subjects to dismay them, although it was natural the neophyte should have some misgivings as to his powers of overcoming and accomplishing so much. It must, however, be borne in mind that the various branches of science had a more or less intimate relation with each other, by which the difficulty of their acquirement was diminished; and, again, such an order of study was adopted, that elementary subjects were first taken, thus laying a foundation upon which the superstructure was erected. By such a course, the task was by no means so Herculean as might have been at first conceived, and perseverance would enable them to accomplish what at first might appear miraculous. Dr. Hill then proceeded to review the various subjects which would claim the student's attention. In conclusion, he said that the object of the medical student should be to cultivate science in its widest sense, in every form; he should endeavour to make a general acquaintance with "the circle of the sciences", especially of those comprehended in the term Natural History; so that the list should not be curtailed, but extended; that it might be truly and literally said of the scientific medical man, he

> "Finds tongues in trees, books in the running brooks,
> Sermons in stones, and good in everything."

In conclusion, Dr. Hill made some practical remarks on the nature of a medical student's practice and progress in the treatment of disease, and on the necessity of a close and patient study of the different modes of treatment in the skilled works published for their guidance. The sketch he had presented of the subjects constituting the medical curriculum would give the students some idea of their extent, importance, and the interest attaching to them. Moreover, as students, they were in the privileged position of travelling with tracks already made, and had neither to be discoverers nor originators. Should it be their happy lot to enjoy the "mens sana in corpore sano", and should they be actuated by a love of acquirement and by a proper sense of duty, then lay before them what could not but prove a delightful and alluring field of knowledge. It was, however, a field which required careful cultivation and continuous tending, before it would yield fruit. The weeds of idleness and seductive habits, such as beset youth on every side, must be carefully rooted out or prevented finding a place there.

NEWCASTLE COLLEGE OF MEDICINE.

Dr. Robinson delivered the introductory address; from which the following are some extracts:—

The recent changes, both in the regulations for medical students and in the legal position of the medical practitioner, render this an important epoch in the history of our profession in this country, and, therefore, present a legitimate opportunity of examining the basis on which the science and practice of medicine are established.

It has been wisely said that the proper study of mankind is man; and if the observation be generally correct, how much more forcibly must it apply to the future members of a profession whose special task it is to prevent, mitigate, and remove the personal evils resulting from the ignorance, the weakness, and the natural and acquired morbific agencies to which the human race are liable. And in every department of

medicine we accordingly find that the most successful practitioners—those who have acquired the most perfect mastery over disease—are the men whose extensive acquaintance with the infinitely diversified constitutional peculiarities of different individuals has enabled them the most skilfully to adapt to each form of disease the varied resources of their art. An intimate knowledge of man in his corporeal, mental, moral, and social aspects, therefore, constitutes the essential basis of rational medicine, and can alone impart to medical practice the dignity and immutability of truth.

Dr. Robinson then went on to show that, in addition to an intimate knowledge of anatomy, the medical student must have at least a general acquaintance with the sciences of Natural Philosophy and Chemistry before he can understand even the more simple and healthy actions of life. And at every subsequent period of his career he will discover that the principles comprehended in the same sciences play an equally important part in the production of disease, in the explanation of its phenomena, in the detection of its symptoms and effects, and in the supply of remedies for its mitigation and removal. In tracing the laws of disease, which are even more diversified and complicated than those of health, the student has to adopt an order of proceeding somewhat similar to that previously indicated. How can that acquaintance with the essential parts of medical science, and, more especially, how is the capability of rightly applying, to individual cases of disease, the principles laid down by that science, to be most effectually acquired? Evidently, not by any one educational agency, but by a combination of several. Sciences of observation, like anatomy and chemistry, can only be learnt by a familiarity with the facts and phenomena of which they are chiefly composed, though their study will at the same time be facilitated by the explanation of the laws governing those phenomena. Sciences of reasoning, such as general physiology, general pathology, and therapeutics, in addition to the adduction of illustrative facts, require for the guidance of the student among the mazes of conflicting theories, and to enable him thoroughly to understand the principles which are to render him the master and not the slave of the remedies employed, that he should be accustomed to the difficulties of medical reasoning, that he should be informed of the grounds on which received opinions rest, of the observations and experiments from which they are deduced; and hence, oral instruction and conversational examinations constitute the most efficient means of imparting information in those sciences. And the various practical applications of medical science demand a consideration of the modifying influence exerted by contingent circumstances, and by individual and local peculiarities, which lectures alone can never teach, and the inferences from which nothing but repeated actual demonstration in the living body can properly supply.

The alterations which have recently been made in the regulations of the Royal College of Surgeons and of the Apothecaries' Company, evidently result in some degree from a change of opinion as to the relative value of the various means of instruction in the formation of a judicious and skilful medical practitioner. It has been found that hitherto the student has occupied too passive a character in the work of medical education; that in many cases his mental energies have remained unstrung during the greater part of the time allotted for his professional instruction; and that, by a mere effort of memory, he has at the last endeavoured to acquire hurriedly, superficially, and almost unintelligibly, the semblance of that knowledge which ought to be thoroughly matured, and the foundations of which should be clearly appreciated. To remedy this admitted evil, it has been decided that both the education and the examinations for a medical diploma shall henceforth be more demonstrative and practical. The number of lectures to be attended by the student is diminished, but on the other hand, he will be required to devote more time to the laboratory, dissecting-room, and hospital, and the amount of clinical instruction afforded there will be increased. To test his progress, and at the same time to enable him gradually to concentrate his efforts on the more practical parts of his education, he will be permitted to present himself at three different periods for examination. But if these repeated examinations should ever appear irksome when contrasted with the *dolce far niente* of bygone days, let the aspirant for professional status and honours remember that there is no royal road to learning; that it is the duty of the examining boards, acting for the interests of the community at large as well as for the dignity of the medical body, to be careful that no inadequately educated person shall be entrusted with human life on the faith of his possession of a diploma; that the most available and generally the most enduring part of a man's knowledge is that which he has acquired for himself; and that, in the words of one who was an accomplished physician as well as an elegant poet—

> "By thought, by labour, and by toil,
> The wreath of just renown is worn;
> Nor will ambition's awful spoil,
> The flowery pomp of ease adorn."

Dr. Robinson then proceeded to comment on the necessity and advantage of clinical instruction.

A routine mode of practice in the treatment of disease has long been one of the opprobria of medicine, and has, doubtless, occasionally led to the loss of valuable lives. There are indeed few more dangerous members of society than the medical practitioner who has an invariable and infallible remedy for every symptom; and it is to be feared that in too many cases men have commenced to practise with no greater knowledge of disease than that constituted by the effort of memory which connected a certain word with certain phenomena. Such a practitioner is but one degree above an empiric. He commences with a series of stereotyped formulæ, which he will probably continue to employ to the end of his career, happy in his ignorance of the mischief he may at any time perpetrate, and perhaps absolutely proud of his possession of an artillery of drugs, infinitely more formidable to the conservative than to the destructive forces acting in the bodies of his unfortunate patients. It would probably be useless to tell such a man that disease does not consist merely in the symptoms which it occasions, and that those symptoms are sometimes but the beneficial efforts of nature to relieve the intensity, and expel the noxious products of morbid actions. Still less could he comprehend the necessity of regarding the alleviation of symptoms as a secondary object of treatment, and of concentrating his chief attention upon the discovery of the seat, the cause, and the complications of the essential malady, and upon the application to it of his most efficient means of treatment. On the other hand, how immensely superior must be the therapeutic knowledge and practical skill of the student who has availed himself of the opportunities afforded by prolonged clinical teaching. He has doubtless learnt that disease is not the simple uniform process sketched in nosological systems; he knows that the same symptom may be common to several diseases, and may even accompany opposite pathological conditions; he is aware that one disease may be induced by another, and that several may exist simultaneously; he has further acquired the important practical lesson that the physician sometimes best evinces his skill by temporarily abstaining from the employment of all energetic measures; that to act decidedly may sometimes be to injure, and that the successful termination of a case may often depend upon the practitioner knowing when to temporise and when to strike the decisive blow; thus qualified, he will enter upon the charge of his patients, fully conscious of the danger of rashness on one hand, and of indecision on the other. By clinical teaching, moreover, the important modifying circumstances which demand so much care in the use of particular remedies become deeply impressed upon the attention of the student.

By clinical instruction, then, is communicated the most valuable part of personal experience, that which too generally perishes with its possessor; it is the *lex non scripta* of medical science, the "common law" applicable to the treatment of disease; it conveys in a few words the results of innumerable trials and observations; and it finally incorporates with the ordinary technical topics of medical education, that more extended and more perfect knowledge of man, which is the great basis of all skill and success in the practice of medicine.

The labour assigned to the medical student is assuredly not a light one; the sciences to be mastered by him are numerous and difficult; the discomfort and even dangers to be encountered in acquiring a knowledge of structure and disease are considerable; the mental efforts demanded are severe and protracted; and even when his primary object is accomplished, when he has, by honourably surmounting the difficulties of his examinations, become possessed of the coveted diploma, no path of ease awaits him. The life of a medical practitioner is generally one of incessant bodily toil and mental anxiety; for him night ensures no repose, nor is the duration of his daily labour limited even by the standard of the hardest task-master. What, then, are the attractions which yearly induce so many young men of education, of intelligence and respectability, to enter upon this arduous career? If any student commence his professional education with a desire of acquiring wealth, he has mistaken his vocation, he will be disappointed in his hope,

and that other more easily acquired occupations will much more certainly ensure the realisation of that desire. A competency the medical practitioner may be fortunate enough to acquire; more he can scarcely expect. But on the other hand, a man of ordinary skill and of unexceptionable character need never starve, he can always secure the means of existence somewhere. The ambition of a student of medicine must therefore take another direction. He will find that in the great world many men are valued for what they have, a few for what they are. The respect paid to the former is hollow and fictitious; but the admiration and affection which mankind instinctively, and often unconsciously, bestow upon the truly great and good man is a possession which defies alike the lapse of time and the vicissitudes of fortune; it is one which money cannot purchase, and which no human power can take away; and the endeavour to deserve it will add to personal happiness and to the honour of the profession. Nor are the study and practice of medicine undivested of other rewards. To a man of intellectual tastes, what an illimitable field of speculation and inquiry is constituted by medicine and its accessory sciences; and there are few pleasures more permanent and legitimate than those accompanying scientific investigation and discovery.

The Act to regulate the qualifications of practitioners in Medicine and Surgery, which came into operation on the first day of this month, contains provisions of great importance to the medical profession in this country. It may be expected that the representative council will avail itself of every opportunity to support the just claims and reasonable desires of the profession. Perhaps the most important clause in the new Act is the 40th, which subjects to a penalty any person "who shall falsely and wilfully pretend to be, or take, or use the name or title of a physician", etc. If this clause be fairly interpreted, and its penal provision put in force by the legal authorities of this country, there is every reason to hope that the horde of unprincipled adventurers who have too long fattened upon the credulity and ignorance of the community will speedily be remitted to more legitimate and creditable occupations.* It may, in reference to this point, be desirable to explain that neither the framers of the Act nor the medical profession generally desire to inflict any penalty for peculiarities of opinion upon medical subjects; for the 23rd Clause of the Act wisely provides for the utmost latitude and liberality in this respect. The only restriction desired, and which Parliament has apparently granted is, that designing and unscrupulous men shall not obtain money from the more helpless and afflicted portions of the community, by falsely assuming to be the educated and competent persons which they assuredly are not.

The instalment of medical reform, Dr. Robinson said, which has just been obtained, does not, as was at one time proposed, at all tend to abolish the existing medical corporations; and in this respect it appeared to him that Parliament had acted wisely. So long as the legal rights of every qualified medical practitioner are rendered uniform, he could perceive no advantage from endeavouring to establish by law an impracticable equality of professional status. The various elements of mental power exist in different degrees in different persons, and produce corresponding variations in the relative perfection which each attains, in the direction to which each is applied, and in the success attending its efforts. Hence, of a number of students of medicine who may happen to start from a position precisely equal as regards fortune, education, and other analogous conditions, it is by no means certain that, within a few years after their entrance upon practice, any two of them will be found working in precisely the same spirit, and with the same object. One man will, perhaps, manifest a taste for original investigation, and, in order to gratify it, will be content to remain for years unremunerated in obscurity, and perhaps in poverty, looking to an ultimate reward in the form of a leading consulting practice in those diseases which he may have elucidated by his labours; and perhaps, also, not unmindful of the pleasure of hereafter associating with those distinguished members of his profession whose writings and discoveries he has long been led to admire. Another of the same group of students, possibly more easy in his circumstances, but having an opportunity of stepping at once into what may be termed an hereditary family practice, avails himself of it, acquires at once a comfortable income, and is content thenceforth to leave the toils and honours of professional exertions to his more ambitious friend. A third, having a taste for operative surgery, seeks for the appointment of hospital surgeon, and throws all his efforts in the direction of surgical practice.

Of what avail, then, would it be for any legislative measure to declare that all distinctions in the medical profession shall cease, and that physicians and consulting surgeons shall thenceforth disappear and merge in the general body of practitioners? It is true that the charters of existing corporations might be withdrawn; but in this free country no law could prevent their members from reassembling and declaring themselves united for the promotion of medical science, and as willing to receive among their number such medical practitioners as chose to comply with the conditions they imposed as a qualification for membership. In fact, most of our great medical and scientific bodies originated in this very manner. From the foundation of the London College of Physicians by Linacre and Harvey down to the comparatively recent establishment of the Royal Medical and Chirurgical Society, from the private meetings of a few philosophers, which ended in the formation of the Royal Society, to the period of the first assembling of the British Association for the Promotion of Science, it has been by the voluntary union of men animated by a kindred zeal, that medical and scientific institutions have flourished. The highest and best interests both of the profession and the public, will be promoted by the additional development, rather than by the abolition, of intraprofessional distinctions. And, instead of endeavouring to tie down all the members of our body to one uniform low level, the utmost encouragement should be held out both by the state and by the profession at large, for many of its members to devote their energies to the extension of the boundaries of medical science, and to the introduction of improvements in medical and surgical practice. The cause of humanity and the honour of our country would thereby both be served, and the great body of the profession would gain not only by the increased efficiency of their remedies, but by the additional public recognition of the social importance of their calling.

There are many discouraging circumstances still to be overcome; and not the least is the prevalence of false systems, even among properly educated practitioners. Of these, a few are rather to be pitied than condemned; for they are evidently the victims of some of those extraordinary perversions of the reasoning powers, which occasionally occur in men of the highest ability, and it is both more pleasing and more charitable to think rather of the contributions to science made by men in the vigour of their intellect, than of their later errors. In other and more numerous instances, there is reason to suspect a want of principle, and a desire to profit by that love of the marvellous, which pervades all classes of the community. The wisest course to adopt in reference to these pseudo-scientific systems is to take as little notice of them as possible; for the history of medicine shows us how one vaunted discovery after another has risen, flourished, faded, and disappeared, and so it must always be with doctrines destitute of the solid foundation of truth.

There is yet another evil, which, however painful, must not be altogether overlooked—the habit of competing with illiterate and illegal empirics in advertisements, placards, and affectedly low charges. The plea for this course is the alleged high charges of physicians in particular, and of all other medical practitioners. There are, indeed, classes but one degree removed from actual poverty, to whom it may be desirable that the advantages of competent medical aid should be afforded at a very moderate rate of remuneration. And many respectable mechanics and others would gladly see the introduction of a method, by which such aid might be obtained without subjecting themselves or their families to even the slight degradation of appearing as patients in a public charity. In populous country districts the same classes, by small regular contributions, ensure proper attention to themselves and families when afflicted by disease, at the same time that the practitioner is remunerated by the number and certainty of their subscriptions. At Birmingham and other towns, successful attempts have been made to introduce among the working classes a system of self-supporting dispensaries, and Dr. Robinson would commend to the serious consideration both of the public and of the profession the propriety of establishing similar institutions in this (Newcastle-on-Tyne) and the neighbouring towns. The working man, who out of his weekly earnings made such a provision for the welfare of his family, would be rewarded not only by the consciousness of having done his duty towards them, but would also indirectly gain by the acquisition of an additional habit of prudence and forethought; and the plea for the advertisements which have recently elicited so much unpleasant comment, would thereby be removed.

The future of our profession is a problem of great social importance, for with it are mingled the interests of science and

civilisation. We have seen that medical science involves the study of man in all his diversified relations, and in the practice of medicine we are brought in contact with every stage and form of human existence. Disease is limited to no class, to no country, and in its presence all those minor distinctions which ordinarily divide mankind vanish. We may indeed apply to disease the very language with which the great Raleigh apostrophised its too frequent and ultimately inevitable termination:—"O eloquent, just, and mighty death, what none have dared thou has done, what none have attempted thou hast accomplished, thou hast gathered together all the might, majesty, and meanness of mankind, and hast covered them with these two words—*Hic jacet.*"

British Medical Journal.

SATURDAY, OCTOBER 16TH, 1858.

THE MEDICAL COUNCIL.

The formation of the Medical Council goes on gradually. Since we wrote last week, three appointments have been made in accordance with our predictions:—

Dr. Alexander Wood was proposed by Dr. Begbie at a meeting of the Royal College of Physicians of Edinburgh, on the 12th instant, and elected to represent that body.

Dr. Andrew Wood was chosen on October 8th to represent the Royal College of Surgeons of Edinburgh.

Dr. James Watson has been chosen to represent the Faculty of Physicians and Surgeons of Glasgow.

We stated last week that, among those generally mentioned as the probable Crown Councillors, were Sir James Clark, Bart., Sir Charles Hastings, Mr. Simon, Dr. Christison, and Dr. Stokes. It is right to add, that various other names have been put in circulation, but upon whose authority we know not. Among them are Mr. Fergusson, of King's College; Dr. Chapman, editor of the *Westminster Review;* Dr. Forbes Winslow; and Mr. Southam of Manchester. For the representation of the Universities of Edinburgh and Aberdeen, Professor Balfour has started as a candidate, and has issued a printed circular setting forth his claims; and besides Dr. Corrigan, Dr. Adams is spoken of as a candidate for the representation of the Queen's University in Ireland. There seems to be some doubt as to whether Dr. Bond or Dr. Fisher is to represent the University of Cambridge.

THE PRESIDENCY OF THE MEDICAL COUNCIL.

The question—Is the President of the Medical Council to be a member of the medical profession, or a layman?—is one which is causing much anxious feeling at the present time. Several of our contemporaries have expressed a strong opinion in favour of a medical president; and a meeting of the Metropolitan Counties Branch has been summoned for Friday next, "for the purpose of considering the propriety of taking measures to ensure the election of a member of the medical profession as President of the Medical Council." We hope that this meeting will be well attended, and that the subject will be patiently considered in all its bearings. The question is one of great difficulty, and scarcely ripe for an answer. We must recollect that the Medical Act regards the interests of the public as well as of the profession; and that it may possibly be advantageous for the profession itself that a lay element be introduced. When Bacon bid us beware of the "idols of the den", he spoke a truth which we should remember in the present conjuncture. We well know that associated bodies of men are too apt to view matters from a limited point of view, and that consequently they are liable at times to go wrong. We have seen the evil of this exclusive kind of Council in the military profession; indeed, in nearly all professions, laymen have played important parts; and we cannot well see a reason why the medical profession should be made an exception. Again, there is another and a more important matter to be considered in favour of a non-medical President. By the new Act, we have linked ourselves in a certain degree with the State; we have given over to the Crown a right of sitting by its representatives at our great Council. How shall we in return acquire the right of expressing our ideas at the great council-board of the State? By means of the President, it will be answered. But supposing the President is not a member of Parliament, what then? At the present moment no leading member of our profession—no man that the Council would be likely to elect, has a seat in Parliament; consequently we should be obliged to communicate with the Government at last through an unprofessional person. If we could insure a seat for a medical President, the action of the Council upon the Legislature would be direct and powerful; but, diluted through an agent that has taken no part in its discussions, its effect would, we fear, be weak indeed.

On the other hand, the advantages of having a medical President are numerous and obvious. If we wish a chief to direct the Council, of course the first requisite for the office should be a knowledge of the profession. We must not have a mere dummy at our head—a man who follows, simply because he has not the knowledge to lead. Such a person would alternately be swayed by the opinions of majorities. It has been urged, moreover, that it is just possible a lay President may be a homœopath—that such a person as Lord Ebury, or other nobleman obnoxious to the profession, but possessing influence, may be elected to the presidential chair; and that this evil will be avoided by the appointment of a medical President. We do not see much weight in this argument, however, inasmuch as it is the Council, and not the Government, who have the right of appointing a President; and the Council would not be likely to put a homœopath at their head—not, at least, until the long day when homœopathy may be triumphant. It is urged with much more force, that the appointment of a medical President would afford the means of placing eminent men amongst us on a well deserved eminence—an eminence which would possibly carry with it the honours of the Crown. The President of the Council of the Medical Profession would at least be as important, so far as regards his real usefulness to the state, as a Lord Chancellor. May we not justly look forward to the possession of such a post as a prize due to our own profession? Every year the importance of medical science, and especially the science of health, is becoming more powerfully felt. Can it be doubted, therefore, that the man who presides over the Council called upon to regulate the concerns of the followers of this noble science, will year by year become a more conspicuous and important person in the public eye? To alienate such a post from our profession would be to

filch the brightest jewel from the crown we have laboured so long to bring to perfection.

We have given the arguments *pro* and *con* on this important matter as fairly as we can; but we feel that, ere the question can be settled to the satisfaction of the profession, it must be thoroughly sifted. We therefore invite discussion in our pages; and trust that, in the multitude of counsellors, we shall find safety.

THE WEEK.

At a meeting held on Saturday last, the Fellows of the Royal College of Physicians of London adopted the following resolutions regarding the proceedings to be followed in the election of a member of the Medical Council.

"1. That each Fellow shall write on a slip of paper the name of any Fellow whom he proposes as a representative, and place the same in the hands of the President or Pro-President, and that the votes thus given be then examined by the two senior censors present, or, in the absence of censors, by two Fellows appointed by the President.

"If any Fellow shall have received the votes of two-thirds of the Fellows present, he shall be considered elected.

"2. Should no Fellow have received a sufficient number of votes to determine the election, a second ballot shall at once take place; and not more than three names, having the largest number of votes, shall be put to the ballot; a majority of two-thirds of the Fellows present determining the election.

"Should this ballot not be conclusive, the two Fellows who have received the highest number of votes, shall be again balloted for, and in this case an absolute majority shall determine the issue.

"In any case of an equality of votes between two candidates, a separate ballot shall be taken, to determine, when necessary, the priority of one of the two.

"3. In each case the Registrar of the College, or his *vicarius*, shall write down the name of each Fellow as he hands in his vote, and no Fellow shall be allowed to leave the room until the final result of the ballot shall be declared."

The second Annual Meeting of the National Association for the Promotion of Social Science has been held in Liverpool during the present week. The meeting was opened on Monday evening with an inaugural address from Lord John Russell, President for the year. We shall give such extracts from the proceedings, especially in the section of Public Health, as may be of professional interest. In the mean time, the signs of vigorous development which the Association is manifesting must give great gratification; and, so long as it labours in the spirit indicated by Lord John Russell at the close of his address, it cannot fail of certain, even though very gradual, success.

"We are not", said the president, "like some philosophers of the last century, enamoured of an age of reason which will never come to pass. Nor do we share in the dreams of the philanthropists who ten years ago imagined that if property, and capital, and competition were put down by authority, the human race might sit down in happiness and contentment. Our task is more humble, but, as we conceive, more in accordance with the decrees of our Divine Creator. To mankind is allotted labour as its portion and perpetual inheritance. If any think that he has nothing to do but to eat, drink, and be merry, in that very night as fearful a doom may fall upon him as upon the tyrant of old. If any suppose, like the masters of the Roman empire, that the sword has done its work, and that nothing remains for them but luxurious enjoyment, that very luxury may revenge the conquered world. If any imagine that to them belongs dominion, and that they may indulge in contempt of the unlettered and ill-fed multitude, that very multitude may overwhelm them in bloody and merciless retribution. It is for us to work as truly as the man who forges the iron bar, or the woman who works at the factory-loom. It is for us to endeavour to improve the laws by which the community is governed. It is for us to show how education may be extended and diffused. It is for us to examine and record what has been done for the reformation and punishment of offenders. It is for us to confirm and animate the efforts which are being made to sustain the public health, and thereby preserve for this country her eminence as the home of a vigorous and independent race. It is for us to investigate the conditions of the great problems of political economy, which may often admit of exceptions, but never of refutations. In so doing, we shall but consult the welfare of the present and future generations; in so doing we shall follow the path traced out for us by Almighty Benevolence and Almighty Wisdom."

In the section of Public Health, the Earl of Shaftesbury presided, and delivered an address full of philanthropy and sound sense, of which we hope to be able to give an account in an early number.

We have received the following letter from Mr. Churchill:—

11, New Burlington Street, London, W.
13th October, 1858.

Sir,—I intend to follow up the subject of the sale of the Medical Journals till the dishonest representations rest on the party guilty of making them, and thus committing a fraud on advertisers. I look to you to assist me in establishing the truth.

First. I named the *Lancet* as having the largest circulation; surely, if interest actuated me, I should not state this.

Second. I named the *Medical Times* as having the second largest circulation; and the British Medical Journal the third; and the *Medical Circular* the smallest circulation.

I challenged, and I now repeat the challenge to any party questioning the truth of this statement, to deposit £100 in the hands of Mr. Propert, I engaging to deposit the same amount, the party proved to have made the false statements to contribute this sum to the Medical Benevolent College.

The profession will duly estimate the substituting personal abuse for the acceptance of my challenge. I am, etc.,

John Churchill.

We give insertion to Mr. Churchill's letter with pleasure. At the same time, we cannot exactly see in what way we can assist him in his determination to follow up the "dishonest representations" that he assumes to have been made relative to the sale of the medical journals, further than by stating that our own circulation includes about 2,200 copies sent weekly to members of the Association alone, in addition to a number of copies supplied to subscribers and others who are not members. There can be no manner of dispute respecting this, as the list of our associates is printed, and published to the world. We have refrained hitherto from giving any opinion concerning the relative circulation of the medical journals, contenting ourselves with the assertion that we have by far the largest *country circulation* of any. As, however, Mr. Churchill again ranks the *Medical Times and Gazette* next to the *Lancet*, we must beg leave to differ from him in this particular. Our belief is, that this Journal deserves the second place. With regard to Mr. Churchill's money test, all we can say is, that he does himself injustice. His bare word carries as much weight with it, as it would if backed by his whole balance at the banker's. With the opening and concluding paragraphs of his letter we have nothing to do. We have neither made "dishonest representations" nor used "personal abuse". Those who have done so will best know how to answer the charge.

Association Intelligence.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Metrop. Counties. [Special General Meeting.]	11, Montagu Place, Bryanstone Square.	Friday, Oct. 22nd, 8 P.M.

SOUTH-EASTERN BRANCH:

SOCIAL AND SCIENTIFIC MEETINGS OF THE MEMBERS RESIDENT IN ROCHESTER, MAIDSTONE, GRAVESEND, DARTFORD, AND THEIR VICINITIES.

Social and scientific meetings of members of the South-Eastern Branch resident in Rochester, Maidstone, Gravesend, Dartford, and their vicinities, will be held on the undermentioned days:—

Friday, October 29th, 1858, at 4.30, at the Town Hall, Maidstone.

Friday, March 25th, 1859, at 3.30, at the Town Hall, Gravesend.

Friday, April 29th, 1859, at 3.30, at the Town Hall, Dartford.

The members resident in this district will be gratified by the attendance and assistance of any of the members of the British Medical Association.

James Dulvey, *Honorary Secretary.*

Brompton, Chatham.

MEDICAL BENEVOLENT FUND.

The following are the proceedings of the Committee at the September monthly meeting:—

1. A widow in Wiltshire, left with six children dependent upon her, and without any means. From distress and anxiety, she has lately become partially insane. Voted £50, towards a fund for the education of the children.

2. A medical man in Yorkshire, aged 62, in bad health, partially disabled from practising; married; has had twenty-one children, eleven now alive, five dependent upon him, between the ages of thirteen and one and a half. Voted £30.

3. A widow in Lancashire, aged 38; four children under fifteen years of age dependent on her; earns four shillings a week at needlework. Voted £15.

4. A surgeon in Scotland, aged 65, in bad health; married; two children, one an invalid. Voted £10.

5. Two maiden ladies (sisters) in Oxfordshire, aged 67 and 69, daughters of a medical man deceased—one crippled from rheumatic gout, the other totally deaf—no longer able to get a living. Income £18 per annum. Voted £20, and placed on the list of candidates for an annuity.

6. A maiden lady in Dorsetshire, aged 61, partly blind, no longer capable of teaching. Voted £10, and placed on the list of candidates for an annuity.

7. A physician in Somersetshire, aged 85, disabled from practising, and without means; and

8. A general practitioner in Wiltshire, aged 73, married, and a confined invalid, wholly dependent upon friends, were elected annuitants at £20.

The cases of the other fourteen annuitants were reconsidered; and, the interest of the money invested for annuities having amounted to £286 last year, it was decided that it be expended as follows:—Nine annuitants at £20; Six at £15; and One at £13. William Self, *Secretary.*

October 4th, 1858.

Reports of Societies.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

TWENTY-EIGHTH ANNUAL MEETING.

[*Held in Leeds, Sept. 22nd, and following days*, 1858.]

[*Continued from page* 861.]

Section of Mathematical and Physical Science.

A NEW LAW OF BINOCULAR VISION, BY THE REV. J. DINGLE.

The object of the law in question is to obviate the imperfect vision which would sometimes arise from the difference of the pictures in the two eyes. In some cases this difference would lead to great inconvenience and confusion. It sometimes happens, for instance, that in looking at a field of view at some distance, objects considerably nearer are so interposed as to present themselves in the picture formed in one eye and not in the other. Thus, in looking at a landscape, if the finger or any other object is held before one eye, the image of it from the one retina is superposed in the *sensorium* on a part of the landscape formed in the other eye. On mere physical principles, this might be expected to blot out or greatly confuse that part of the landscape upon which it was placed; but upon trial this is not found to be the case, as that part is merely a little dimmer than the rest from being seen only with one eye, but is equally distinct and as truly coloured. By various experiments the author had ascertained that this was the result of a peculiar power of the will, by means of which the mind is enabled, when two different images are superposed in the *sensorium*, to select whichever it pleases, to bring that object into view, and entirely to obliterate the other,—it sees, in fact, whichever it wills to see, and the other image, simply by being neglected, becomes invisible. In ordinary vision, the determination of the image to be seen is effected by the same act of the will which determines the position of the optic axes; but by certain arrangements which were indicated both images may be made to have the same relation to the optic axes; and as the predisposition to select one or the other is thus obviated, it is made indifferent to the mind which of the two images that occupy that same place in the *sensorium* it shall see. When these arrangements are made, it is found that mere efforts of the will can easily bring either the one or the other into view. The importance of this law, which enables the mind to select its image, was pointed out in different cases of ordinary vision. It obviates the difficulty already adverted to, of having two different pictures on the same spot; it has not improbably an important influence in producing the general stereoscopic effect; it also, to some extent, remedies the effect of squinting, by obliterating the picture in the imperfect eye, which could not be else done without shutting it. The effect of the law, in some extraordinary cases, was also noticed, especially in the power of the will to fix images on the sight, as Sir Isaac Newton instances in his own case (see his *Life*, by Sir David Brewster). The author pointed out the great interest of the subject, not only in its practical aspect, but also as having an important bearing on the connection between mind and matter.

Professor Stevelly said that, in reference to those permanent impressions on the retina so well described in the very interesting letter from Sir Isaac Newton which had been read, he wished to mention a circumstance which occurred to himself this summer, and which he was entirely unable to account for on any optical or physiological principle with which he was acquainted. At the close of last college session, he had been in weak health, and had gone into the country for a few weeks. While there, he had become interested in the economy and habits of bees. One morning, he watched the evolutions in the air of some bees that were swarming; and in the evening, on going to see the hive into which the swarm had been collected, he imagined he saw multitudes of large flies in the air; there were, however, remarkably few flies abroad. On returning to bed, he saw coursing backwards and forwards, between him and the wall, what he recognised as the swarm of bees; the drones being quite distinguishable from the workers, and all apparently in rapid motion. This scene continued to be repeated as long as he remained awake, and occasionally when he awoke in the night, nor had it entirely faded away by next night, although much less vivid. This was the first instance he had ever heard of moving impressions having become

permanently impressed on the retina; nor could he give the slightest guess at the *modus operandi* of the nerve. Notices of fixed impressions, particularly after having been dazzled, are now common enough. The Rev. Dr. Scoresby, at the late meeting at Liverpool, had given a detailed account of some which had presented themselves to him; and a very curious one had occurred to him (Professor Stevelly), in which he had observed in the air, in blood-red characters, the name inscribed on a brass plate, by the reflection of the sun's light, from which he had been dazzled. The optical account of this was simple enough. The retina had been partially paralysed from the intense light reflected from the plate; but as he had turned with pain from it instantly, the part corresponding to the black letters on the plate had escaped, and as he walked on the red strong light reflected from surrounding objects on this part became contracted with the darkness, as yet showing itself on all the surrounding parts of the disordered retina; as the retina recovered its tone, other colours in succession took possession of the place which at first had been red. Sir J. Macneil had told him that a murder had been found out by a similar circumstance. The murderer, then unknown, had been dazzled by the reflection of the sun from a bucket of water, which another man was carrying before him; and soon afterwards, seeing in the air what he took for a bucketful of blood going before him, he was seized with such horror that he declared himself the murderer, and disclosed such facts as brought the crime home to him, so that he was convicted and executed.

Section of Chemical Science.

OZONOMETER. BY E. LANKESTER, M.D., F.R.S.

Dr. Lankester exhibited an instrument for measuring the constant intensity of ozone. This instrument consisted of two small rollers included in a box, which were moved by means of ordinary clockwork. Over the roller a strip of paper, prepared with iodide of potassium and starch, is allowed to revolve, the paper becoming exposed to the air for an inch of its surface in the lid of the box. Twenty-four inches of paper pass over the rollers in the course of twenty-four hours, and thus registers, by its colour, the intensity of the action of ozone in the atmosphere. By this instrument the intensity of the ozone for every hour in the twenty-four could be registered, and *minima* and *maxima* with an average be ascertained. The register of ozone could also be compared with those of the anemometer, and the relation of ozone to the direction and force of the wind ascertained. Dr. Lankester pointed out the importance of ascertaining the presence of ozone, on account of its undoubted relation to health. He drew attention to a series of tables which had been drawn up from the registrations of the anemometer made at London, Blackheath, and Felixstow, on the coast of Suffolk. From these it was seen that the relation of these three places was as 0, 22, and 55. The instrument acted also as a clock, and the time could be accurately marked upon the ozonised paper.

Mr. Marshall made some remarks on his own observations during the last twelve months, and stated that he had not been able to discover, though assisted in the investigation by medical gentlemen, that there was any obvious connexion between ozone and the state of health.

Section of Physiology.

NOTES OF EXPERIMENTS ON DIGESTION. BY GEORGE HARLEY, M.D.

The communication was illustrated by numerous experiments showing the properties of the saliva, the gastric juice, the bile, and the pancreatic secretion. The author stated that, contrary to an opinion lately published by Bernard, he had found that the human saliva contains both sulphocyanide of potassium and iron. The latter substance, however, can only be detected after the organic matters contained in the secretion are destroyed by burning. Dr. Harley had ascertained that a person of nine stone secreted between one and two pounds of saliva in twenty-four hours. The gastric juice, the author said, does not destroy the power possessed by the saliva of transforming starch into sugar; consequently, the digestion of amylaceous food is continued in the stomach. The gastric juice has the property of changing cane into grape sugar. The author made some remarks upon the cause of the gastric juice not digesting the living stomach; and said that his experiments showed that it is not the epithelium lining the organ which prevents its being digested, but the layer of thick mucus which covers its walls. When the latter substance is absent, the gastric juice attacks the walls of the living stomach, and digests them; causing perforation and death. As regards the bile, it seems that this secretion takes an active part in rendering the fatty matters of our food capable of being absorbed into the system. The most curious of all the digestive fluids, however, is the pancreatic secretion, for it unites in itself the properties of all the others. It not only transforms starch and other such substances into sugar; but it emulsionises fats, and even digests protein compounds. As a remedy in indigestion, pancreatine should be greatly superior to pepsine, which can only digest one kind of food, namely, protein. The author said, he had been labouring to obtain pancreatine in a perfectly pure state, and had been to a certain successful. With pancreatine we should be able to digest any kind of food we pleased; and, therefore, the obtaining of it in a state of purity would prove an invaluable boon to suffering humanity.

Editor's Letter Box.

THE MEDICAL ACT: MEETING OF MEDICAL PRACTITIONERS.

Letter from H. W. Lobb, Esq.

Sir,—I beg to inform you that the Committee elected at a preliminary meeting held at the Freemasons' Tavern on the 5th instant, have resolved to convene a public meeting of the profession, to be held on Wednesday, the 27th instant, at 7 P.M., at the Hall of the Freemasons' Tavern, for the purpose of establishing an Association to protect the rights and interests of the general practitioners in medicine and surgery of the United Kingdom, as they may be affected by the New Medical Act.

The special objects to be discussed will be—1. The representation of general practitioners upon the General Council; 2. The rights of the *Members* of the College of Surgeons to protest against diplomas being given to dentists, and their right to a voice in the management of the affairs of their College; and 3. To establish branch societies to assist the Registrar in excluding the names of unqualified practitioners from the Register; and such other incidental business as may appear desirable.

The Committee request the favour of the insertion of this communication in your forthcoming Journal.

I am, etc., Harry W. Lobb, *Hon. Sec.*

63, Gloucester Terrace, Hyde Park, October 13th, 1858.

ECONOMY IN LONDON DRAINAGE.

Letter from Frederick J. Money, Esq.

Sir,—In your leading article of September 18th, commented on by a correspondent last week, you lay down clearly the principle upon which a sound system of drainage should be based; namely, *the sewage to the land, the water to the river.* Thus much is clear as a principle; but no efficient scheme, so far as I know, has ever yet been devised, or at all events published, whereby this most desirable object may be accomplished. Mr. Ward, it is true, hits the nail right on the head when he says that "the real battle of interception must be fought not with enormous works, but in the houses themselves, with modest drain-pipes": and you suggest, with equal truth, that comparatively small channels would suffice to carry this fertilising stream into the country. But still it appears to me that a link is wanting. How to get the sewage from the heart of London into the country does not appear. Surely we need not go back, with your correspondent of last week, to the old system of privies and cesspools, with all their dangers and inconveniences. I have this day laid before the Metropolitan Board of Works a plan of my own, recently patented, by which I think the difficulty may be overcome.

I propose to make use of all the existing sewers and house-drains as outfalls for the rain-water alone, to be discharged, as at present, into the Thames; and to receive the sewage proper by distinct pipes connected with the water-closets, sinks, etc., into iron tubes, laid along the floor of the sewers, and furnished at intervals with conical plugs or other relief-valves, opening outwards. The diameter of each of these main conduits must be proportioned to the quantity of real sewage it will have to carry, thus insuring a constant current, and preventing deposit. The rush of water in floods, instead of sweeping an ocean of filth into the Thames, will thus arrive

there tolerably pure, being altogether external to the conduit tubes; while the sewage itself, uninjured by dilution, will flow through the tubes in a steady current to the water's edge. Thence it may either be conveyed by intercepting channels of comparatively modest dimensions, to be dealt with according to the Leicester mode, or carried off at once, in closely covered lighters, up or down the river, according to the tide, to find a ready market in the rich agricultural counties on either hand.

I am, etc.,

Frederick J. Money.

Thaxted, Essex, October 7th, 1858.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Cory. On October 4th, the wife of F. C. Cory, M.D., Commercial Road East, of a son.

Great Rex. On October 9th, at 23, Holborn Hill, the wife of Augustus Great Rex, Esq., Surgeon, of a daughter.

Hoffmeister. On October 10th, at Cowes, the wife of W. C. Hoffmeister, M.D., of a son.

Marlow. On September 30th, at Malta, the wife of B. W. Marlow, M.D., 28th Regiment, of a daughter.

Sparke. On October 10th, at Mansfield, Notts, the wife of *George Whitefield Sparke, M.D., of a daughter.

Spence. On October 9th, at Letham, Ladybank, Fife, the wife of *Wm. Spence, M.D., of a son.

Trouncer. On October 9th, at 6, Mount Street, Grosvenor Square, the wife of J. H. Trouncer, M.D.Lond., of a daughter.

MARRIAGES.

Beddoe—Christison. *Beddoe, John, M.D., of Clifton, to Agnes Montgomerie, eldest daughter of the Rev. Alexander Christison, and niece of *Professor Christison, at Foulden Manse, Berwickshire, on September 15th.

Davidson—Smith. Davidson, Robert, Esq., Madras Civil Service, to Helen Isabella Rosina, only child of the late Robert Smith, M.D., at Lennox Bank, Dumbartonshire, on October 6th.

Gibbon—Jacomb. Gibbon, Septimus, M.D., of 3, Finsbury Square, to Janet, eldest daughter of Thomas Jacomb, Esq., of 11, Lansdown Terrace, Notting Hill, at St. Leonard's-on-Sea, on October 7th.

Griffin—Thresher. Griffin, R. W. W., M.D., of Southampton, elder son of *Richard Griffin, Esq., of Weymouth, to Julia Augusta, only daughter of John Hardy Thresher, Esq., of Upway, Dorset, on October 12th.

Hooper—James. Hooper, Charles, Esq., third son of John Hooper, M.D., of Hoddesdon, Herts, to Marianne, youngest daughter of the late James James, Esq., of Aylesbury, at Halton, Bucks, on October 5th.

Marsh—Carmichael. Marsh, Willoughby Digby, Captain Royal Engineers, to Margaret Isabella, second surviving daughter of the late Dr. Carmichael, of Trinidad, at St. Peter's, Eaton Square, on October 12th.

Penfold—Packman. *Penfold, Henry, Esq., Surgeon, of Rainham-next-Sittingbourne, Kent, to Mary, only daughter of the late W. K. Packman, Esq., of the same place, on October 6th.

Rowe—Betts. Rowe, Thomas Smith, M.D., of Margate, to Ellen Rosa, youngest daughter of William Betts, Esq., of Sandown, at Upper Deal Church, on October 6th.

Stocker—Tice. Stocker, Captain Edward William, of Carlingford, county Down, to Louisa, third daughter of the late Dr. Tice, Inspector of Hospitals, and Physician to the Forces, at St. Stephen's, Old Ford, on October 9th.

Walker—Secker. Walker, Thomas, Esq., Surgeon, of Wakefield, to Elizabeth, only daughter of William Secker, Esq., of the same place, on September 23rd.

DEATHS.

Bannister. On October 11th, at 63, Coleshill Street, Eaton Square, Florence, infant daughter of H. P. Bannister, Esq., Surgeon, aged 11 weeks.

Dane. On August 3rd, at Hongkong, Eva Louisa, infant daughter of Dr. Dane, Staff-Surgeon, aged 9 months.

Dauney, William John, M.B., Assistant-Surgeon 59th Regiment, on board the hospital ship *Belleisle*, in the Gulf of Pe-tche-li, of cholera, on July 2nd.

Gaskoin, J. S., Esq., Surgeon, at 32, Clarges Street, Piccadilly, on October 5th,

Gibson, John, Esq., Surgeon R.N., suddenly, at Doune, Perthshire, on October 10th.

Ledwich, Thomas H., Esq., late Lecturer on Anatomy and Physiology in Dublin, and Surgeon to the Meath Hospital, suddenly, of pulmonary apoplexy, on September 29th.

Loch. On October 5th, at Ealing, Sarah, wife of William James Loch, Esq., late Surgeon in the Hon. East India Company's Service.

Reid. On October 7th, at Newbiggin-by-the-Sea, Northumberland, Julia Janet, daughter of *John C. Reid, M.D., aged 3 months.

Shaw. On August 1st, on his passage to England from Penang, Alexander Wardrop Shaw, Esq., youngest son of the late John Shaw, M.D., of Great Marlow.

Stretton, Arthur, Esq., Assistant-Surgeon 1st Battalion 60th King's Own Royal Rifles, at Shahjehanpore, of ague, aged 28, on August 18th.

Williams. On October 5th, at the College, Marlborough, Eugene Arthur, youngest son of the late Robert Williams, M.D., of Bedford Place, Russell Square, aged 16.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, October 8th, 1858:—

Altham, George, Preston, Lancashire
Finegan, James, Liverpool
Heale, Alfred, Luton, Bedfordshire
Hill, Thomas Miles, Clifton, near Bristol
Ireland, John, Kingswinford, Staffordshire
McCourt, Francis, Portglenone, co. Antrim
Rawdon, Henry Greenwood, Liverpool
Shea, John, Blackfriars Road
Walker, Richard Pettifer, Birchfield, near Birmingham

At the same meeting of the Court—

Breakey, John, passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College: his diploma bearing date December 19th, 1851.

Apothecaries' Hall. Members admitted on Thursday, September 30th, 1858:—

Brown, Robert, Greengate, Salford, Manchester
Gibson, Andrew, South Shields
Roberts, Roger, Rathkeale, Ireland
Smith, Henry Bennett, Hertfordshire
Walker, James Richards, Liverpool

Also six gentlemen who passed their first examination.

Thursday, October 7th:—

Dubuc, Emile William, George Street, Edinburgh
Hopgood, Thomas, Chipping Norton, Oxfordshire
Molineaux, James, Manchester
Thornton, Benjamin, Elford, near Lichfield

HEALTH OF LONDON:—WEEK ENDING OCTOBER 9TH, 1858.

[From the Registrar-General's Report.]

The deaths in London, which had been in the previous week 1021, declined in the week ending Saturday, October 9th, to 993. In the ten years 1848-57, the average number of deaths in the weeks corresponding with last week was 1073; but as the deaths returned for last week occurred in an increased population, the average, with a view to comparison, should be raised in proportion to the increase, a correction which will make it 1180. When the deaths from cholera in epidemic seasons are eliminated from the calculation, the comparison will show that the deaths in the present return are less by about a hundred than would have resulted from the average rate of mortality at the beginning of October.

Sixty-three districts of England, in which the mortality is least, have been selected, and their average rate of mortality in the last three months of the year has been ascertained. If the deaths in London last week had been according to "the healthy rate" thus obtained, and which it is useful to adopt as

a standard, they would have been 770; and the actual excess, or the number of *unnatural* deaths, is 223.

The mortality from scarlatina continues to increase; the deaths from it having risen from 125 and 134 in the two previous weeks to 145 last week. All of these 145 deaths, with the exception of 10, occurred to children under ten years of age. The corrected average of this disease for ten corresponding weeks is 76. It reached a higher mortality than the present return shows in the first week of October 1848, when the deaths from it rose to 180. Six deaths from scarlatina were registered last week in the sub-district of St. Margaret, Westminster; six in Islington East; seven in Bow.

Of 41 *violent* deaths registered last week, eleven were cases of suicide.

Last week the births of 810 boys and 711 girls, in all 1521 children, were registered in London. In the ten corresponding weeks of the years 1848-57, the average number was 1382.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·685 in. The barometric pressure varied from 29·20 in. to 29·92 in. The mean temperature of the air in the week was 52·1°, which is 0·4° below the average of the same week in 43 years (as determined by Mr. Glaisher). The thermometer in the shade attained its highest point on Sunday, when it was 69·5°; it fell to its lowest point on Saturday, when it was 35·4°; the range of the week was therefore 34·1°. The mean daily range was 19·7°. The difference between the mean dew-point temperature and air temperature was 6·9°. The mean temperature of the water of the Thames was 58·1°. The mean degree of humidity of the air was 75. The wind was nearly always south-west. The rain-fall was 0·47 in.

In the thirteen weeks ending Saturday, October 2nd, 14,345 deaths were registered in London; a number which differs little from that of the same quarter of last year, when it was 14,259. The mean temperature of the quarter was 61°, which is lower by 2·3° than that of the corresponding period of last year, but higher than those of the preceding three years. Of the 14,345 deaths, 5,032 attributed to diseases of the zymotic character, constitute a high proportion, which is drawn to the extent of more than four-fifths from the youngest of the population. Scarlatina has carried off many children, and it has increased manifestly during the latter half of the quarter. The deaths referred to it are 1,243, and are more numerous than in any of the corresponding quarters of 1854-57, in which the numbers varied from 349 to 978. Croup and whooping-cough also exhibit an increase on those quarters. Diarrhœa and summer cholera have been perceptibly less fatal than usual. In the summer quarter of 1857, the deaths from the former of these complaints were 2,343, from the latter 177; while the respective numbers of the quarter now terminated are 1,391 and 90.

Of 500 deaths produced by *means of violence*, 412 were the results of accident or negligence; 21 were by murder or manslaughter; and 67 by suicide.

A Quack Doctor's Letter. The following is given in the *Edinburgh Medical Journal* for October, as a *verbatim* copy of a letter actually written and sent from York; but which through a misdirection, fell into other hands than for those intended:—

"York, March 16th, 1849.

"Gentlemen,—I arrived safe in York by the express train, after a pleasant journey of seven hours; I hope to find business good, and shall commence in the morning. The health of the inhabitants, as far as I can learn to-day, is good, but with perseverance they may be persuaded into sickness. I fear not but a good trade can be done, as a preventative of cholera, which will answer our purpose equally as well as if parties were in an actual collapsed state. Money must be made, and that being our object, at it I go; kill or cure needs not to me, so long as I obtain the rhino. I see a good dodge here, called sugar coated pills; but ours must be all sugar to outstrip them. I would have you prepare at least three tons of the pills, done up in parcels of fifty boxes each; have a few fresh bills struck off, recommending more to be taken night and morning, than we have hitherto done; they must go down. I shall be able to do the whole of York in a week's time; and when the pills are fairly established, we must have the ointment out, for the cure of all wounds; I feel persuaded that will be swallowed up greedily enough, I have made one call on ——, booksellers, here; they are pill sellers, and I think they can be persuaded to take one hundred boxes; and they being connected with the press, we must give them an advertisement with a long list of cures, stating how miraculous a cure was made of the Duke of Wellington, after taking two boxes, and that he now takes some before every meal, feeling assured of their health preserving properties. There are a many Quacks here, but of course we are from London and must out-do them all. I have bought a splendid gold guard chain here for seven guineas, for I must make an appearance; the inhabitants appear knowing. I must now conclude, with again begging of you to get the list of cures printed, say a small pamphlet of twelve pages, and finish by stating that thousands more could be adduced, if requisite,

"I remain, Gentleman, yours affectionately,

"* * * * * *, York.

"P.S.—Give my love to my wife, and tell her I shall write in the morning."

Electricity as an Anæsthetic in Dentistry. On Tuesday evening, a meeting was convened at the College of Dentists, in Cavendish Square, to raise a discussion respecting the value of electricity as an anæsthetic in tooth-extraction. Mr. Peter Mathews, the President of the College, occupied the chair, and was supported by Dr. Elliotson, Mr. Rymer, Mr. Hockley, Mr. Purland, and other gentlemen. The President stated that the questionable safety of chloroform, and its indiscriminate use in surgical operations, now occupied the public mind. Coupled with this reflection was the fact that painful revelations of a private character and peculiar desires were too frequently evinced by patients under the influence of that lethargy whose issue might be eternal. These considerations made it specially incumbent on the profession to determine, if possible, whether any local application could be discovered for removing pain without suspending the consciousness of the individual. Hence the important question of electricity as an anæsthetic agent. Mr. Mathews passed in review the various methods by which electricity might be applied, with the intention of rendering the extraction of teeth painless; but, unhappily, the results of his experience did not warrant him in stating that so desirable a condition had as yet been attained. On the contrary, he believed that the attention being arrested and the mind occupied during the application of anything so novel as electricity, would sufficiently explain the power which that agent apparently possessed occasionally to somewhat mitigate pain. Several other gentlemen corroborated this conclusion by the results of their individual experience, but the subject was open to further inquiry, and Dr. Elliotson moved that a committee be formed for that purpose. A vote of thanks to the Chairman having been duly acknowledged, concluded the business of the meeting.

TO CORRESPONDENTS.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a written letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Communications have been received from: — Dr. Kelburne King; Dr. T. Inman; Mr. T. Holmes; Mr. Erichsen; Dr. Farrar; Dr. Beddoe; Dr. G. Robinson; Dr. Alfred Hill; Dr. William Moore; Mr. J. K. Spender; Dr. Alison; Mr. F. J. Money; Mr. Trend; Dr. Gibb; Dr. Beddoe; Mr. H. Penfold; Dr. R. W. Griffin; Mr. John Scott; Mr. H. W. Lobb; Dr. William Spence; Mr. John Churchill; and Mr. J. Z. Laurence.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. The Pathology and Treatment of Stricture of the Urethra and Urinary Fistulæ. By *Henry Thompson, F.R.C.S., M.B.Lond. Second Edition, much enlarged and revised. London: Churchill. 1858.
2. Practical Midwifery: comprising an account of 13,748 Deliveries which occurred in the Dublin Lying-in Hospital during a period of Seven Years, commencing November 1847. By Edw. B. Sinclair, A.B.T.C.D., and George Johnston, M.D.Edin. London: Churchill. Dublin: McGlashan and Gill. 1858.
3. Nutrition in Health and Disease. By James Henry Bennet, M.D. Churchill. 1858.
4. The Cause of Death in the Still-born. By R. King, M.D. Second Edition. London: Churchill. 1858.